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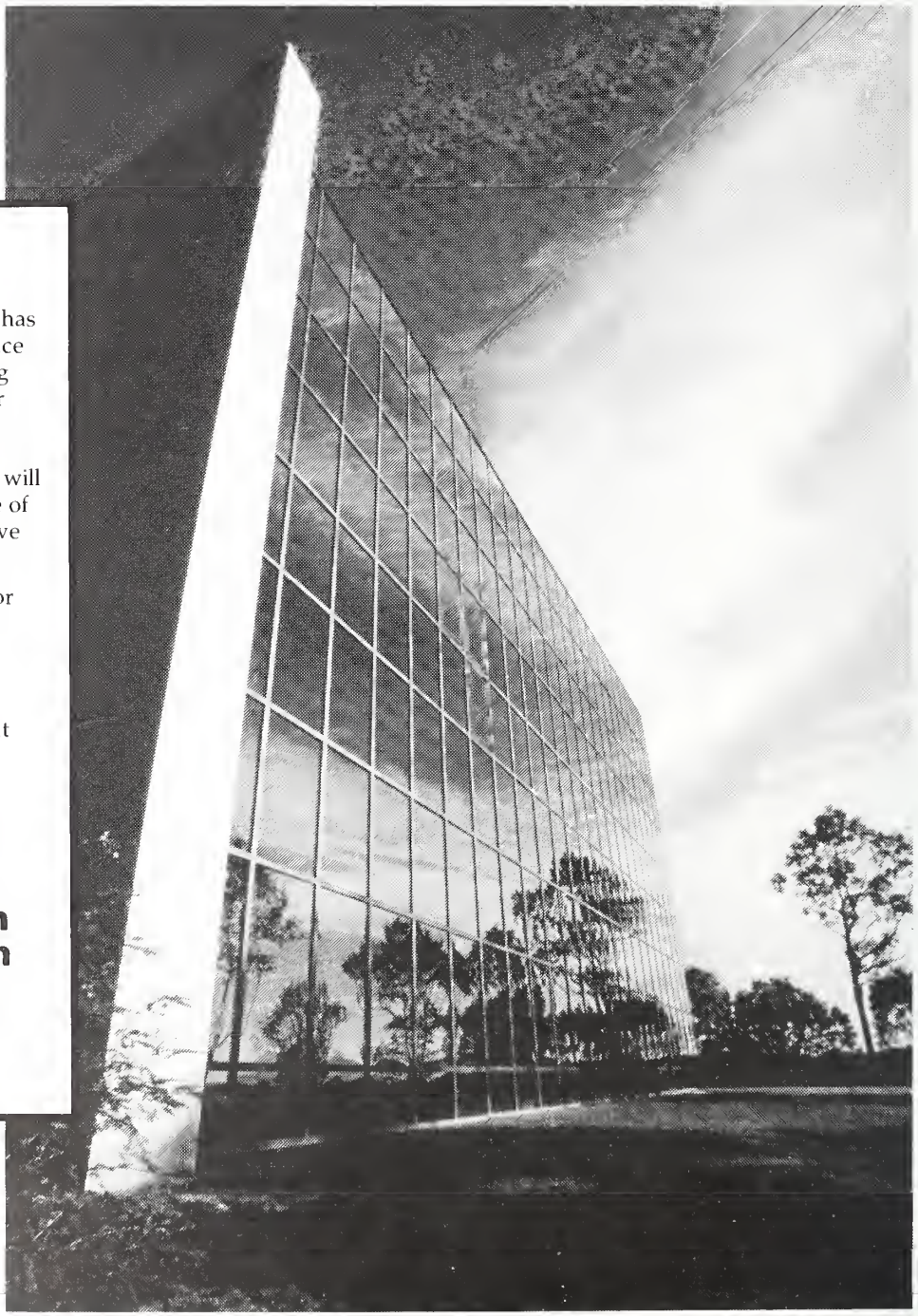

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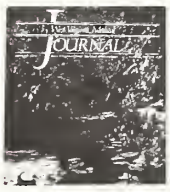

Front Cover

A beautiful wintry day at Otter Creek in Randolph County. Photo courtesy of *Stephen J. Shaluta Jr., West Virginia Division of Tourism and Parks.*

The red eye: Avoiding pitfalls from topical ocular therapy

WILLIAM H. BENSON, M.D.
JEFFREY D. LANIER, M.D.
Department of Ophthalmology, University of Texas Medical School, Houston

Abstract

Acute and general medical care facilities are often faced with the challenge of diagnosing and managing problems related to the external eye. Making the correct diagnosis, possessing knowledge of the natural course of the disease, and understanding the potential benefits and risks of topical ocular therapy are necessary for the proper managment of an acute or chronic red eye.

Introduction

The acute and chronic red eye creates a challenge in both diagnosis and management for the primary care physician. It is necessary to obtain an accurate history of symptoms and observe clinical signs to achieve the correct diagnosis. Slit-lamp biomicroscopy may not be available in many acute-care facilities. When the diagnosis is uncertain, referral to an ophthalmologist is recommended to reduce the risk of mismanagement due to misdiagnosis. In these instances, prescribing incorrect topical medications for some patients may be detrimental.

Glucocorticoids suppress the natural immune response to both infectious and non-infectious ocular diseases. Their use can facilitate bacterial, viral, chlamydial, fungal and parasitic proliferation, as well as possibly promoting corneal penetration of superficial microbial infections. Corticosteroids can induce cataract formation and glaucoma in susceptible persons from prolonged administration (1).

Topical anesthetic agents are toxic to the cornea with prolonged usage. They can cause sloughing of the epithelium with corneal stromal edema, infiltration, and perforation (2). Topical anesthetic containing agents should only be used for diagnostic purposes, and should never be dispensed to the patient for relief of ocular discomfort.

Topical corticosteroids may be used to reduce the inflammatory cellular response in non-infectious processes (3). Notable examples are anterior segment problems such as severe staphlococcal toxin hypersensitivity, phlyctenulosis, severe forms of atopic, vernal, and acne rosacea keratoconjunctivitis, uveitis and some cases of scleritis (4).

Herpes simplex viral keratitis (HSV type 1) is a major cause of infectious blindness in the United States, with 300,000 cases diagnosed yearly. The differential diagnosis of ocular inflammation must include ocular herpes simplex. Ocular herpes may be classified into two forms -- primary and recurrent. Both primary and recurrent ocular herpes simplex can present in many different clinical forms and can be very difficult to diagnose.

Primary ocular herpes simplex is a self-limited and benign keratoconjunctivitis with or without skin involvement in the non-immune but immunocompetent host. It resolves without scar formation in up to 21 days. No treatment is necessary and topical corticosteroids are contraindicated.

Recurrent HSV in the form of epithelial keratitis may be characterized by punctate, dendritic or geographic ulceration of the corneal epithelium noted clinically with flourescein staining. The natural clinical course of dendritic keratitis is usually benign. Dendritic keratitis may persist for 21 days regardless if treatment is initiated or deferred (5). If topical antiviral therapy such as trifluridine (Viroptic) is initiated, it should be administered 5 to 9 times daily for up to 14 days. However, prolonged use beyond 14 days can cause a toxic keratopathy that includes punctate epithelial erosions and edema (6). Topical corticosteroids are contraindicated in herpes simplex epithelial keratitis because they may promote spread of ulceration, facilitate deep penetration of surface virus, and prolong the infectious phase for some strains of HSV type 1 (3). The treatment of herpetic stromal disease and keratouveitis is potentially sight threatening, and should be referred to an ophthalmologist.

The most important thing a physician can do is to recognize the correct clinical diagnosis of epithelial herpes simplex keratitis and not treat the eye with topical corticosteroids. Laboratory diagnosis of ocular HSV requires scraping active skin vesicles, conjunctiva or corneal epithelial lesions and demonstrating the presence of virus by direct cytology, antigen detection assays, or tissue culture. A positive test result may support the presumptive clinical diagnosis made by slit lamp examination. However, the positive yield of these tests are markedly reduced if strict collection and transport protocols are not properly followed, or if access to experienced ocular microbiology personnel are not available.

Adenoviral infection is one of the most common causes of an acute red eye ("pink eye"). The presence of a watery discharge suggests adenoviral infection and not a bacterial conjunctivitis. It is often unilateral at its onset with less severe involvement of the second eye within one week. The natural

course of adenoviral conjunctivitis is benign, self-limited and varies in duration from a few days to four weeks. The typical signs assessed by the physician are an acute onset of conjunctival hyperemia, watery discharge, and in many cases, a palpable preauricular lymph node. The hallmark clinical signs of palpebral conjunctival follicles and central keratitis are rarely appreciated with a penlight and may require examination with a slit-lamp biomicroscope. Adenoviral conjunctivitis rarely results in serious complications. The conjunctivitis component spontaneously starts improving within 10-14 days and resolves within 28 days, depending on the serotype involved. Topical corticosteroids may suppress some of the inflammation or membrane formation, but may also prolong the natural course of the disease. Corticosteroids do not eradicate the virus. The patients' natural immune response is necessary to eradicate the virus (7), and frequent handwashing and strict hygiene serve to prevent the hand-to-eye spread of this contagious viral conjunctivitis.

Primary HSV type 1 and inclusion conjunctivitis caused by *Chlamydia trachomatis* may present as a unilateral or bilateral follicular keratoconjunctivitis without skin lesions, thus mimicking adenoviral conjunctivitis. Topical corticosteroids may prolong or worsen both disease processes (8,9,10). This is further reason to avoid prescribing any topical corticosteroids in the management of an acute red eye. The understanding that adenoviral keratoconjunctivitis has a self-limited natural course, even though the clinical signs and symptoms may worsen before improvement, is an important concept that patients need to understand to establish their reassurance.

Acute bacterial conjunctivitis is usually a self-limited disease that follows a natural course of up to 14 days without treatment. It is characterized by the presence of conjunctival hyperemia and a mucopurulent discharge. There is no keratitis with flourescein staining and no palpable preauricular lymph nodes. The natural course can be shortened to several days with treatment using an appropriate topical antibiotic (11,12,13,14,15). Again, topical corticosteroids are contraindicated.

The most common groups of bacteria that cause a non-severe conjunctivitis in adults and children are *Staphylococcus, Streptococcus* (including *S. pneumoniae),* and *Haemophilus* species (15). Topical broad-spectrum antibiotics available for use against these organisms are neosporin®, polysporin®, polytrim® (or the generic equivalent), ciprofloxacin (Ciloxan), and chloramphenicol. Gentamicin and tobramycin (Tobrex) used alone are ineffective against *Streptococcus* and some *Staphylococcus* species. Bacitracin and erythromycin ophthalmic ointments are good for gram positive organisms and can be used with either gentamicin or tobramycin for a broader spectrum of coverage. Prolonged use of some topical antibiotics may produce signs of ocular toxicity (16). If there is no clinical improvement of the conjunctivitis within one week, the patient should be referred to an ophthalmologist for further evaluation.

Acute bacterial conjunctivitis is an uncommon and often overdiagnosed cause of an acute or chronic red eye that presents for evaluation (17,18). However, the presence of a mucopurulent discharge may represent true bacterial conjunctivitis.

Cases of conjunctivitis caused by *Neisseria* species or *C. trachomatis* require systemic antibiotics. Children with conjunctivitis should be cultured and scraped for bacterial analysis prior to starting therapy. Children with conjunctivitis caused by *Haemophylus influenza* or beta-hemolytic *Streptococci* may require systemic antibiotics if further evaluation determines a risk of upper respiratory, mengingeal, or ocular adnexal involvement (19).

Topical antibiotics can suppress the clinical findings of follicular conjunctivitis caused by *C. trachomatis* without eradicating the obligate intracellular microbe, which requires a three-week course of systemic tetracycline or erythromycin. Without the proper treatment of oral antibiotics, inclusion conjunctivitis can become a chronic follicular conjunctivitis, lasting months despite the use of topical antibiotics (9).

Infectious blepharitis may result in a keratoconjunctivitis caused by a hypersensitivity reaction to the bacterial toxins of *Staphylococcus* species (20). The toxins reach the external ocular surface as a result of spillover from the eyelid margins, where it produces a keraton-conjunctivitis. Patients complain of chronic irritation, burning, mild itching and crusting of the eyelids. There is mild to moderate hyperemia of the conjunctiva and eyelid margins without a mucopurulent discharge. The natural course is one of chronic but episodic discomfort that improves and worsens with much variation. Treatment should be aimed at controlling the source of bacteria on the eyelid margins with an appropriate antibiotic ointment such as bacitracin. This can be accomplished through careful placement of an antibiotic ointment along the eyelid margins and base of the eyelashes with a clean finger or cotton-tip applicator. Topical antibiotic drops are usually less effective for staphylococcal blepharitis because bacteriacidal concentrations are not obtained along the eyelid margins.

When prescribing antibiotic therapy for bacterial related pathology, a satisfactory drug should be active against the expected ocular pathogens, have low ocular and systemic toxicity, and low allergenicity. The aminoglycoside antibiotics such as neomycin (neosporin), gentamicin, and tobramycin are toxic to the corneal and conjunctival epithelium at the site of delivery. In addition, these aminoglycosides are often implicated as a common cause of allergic contact dermatitis from a hypersensitivity response to these agents. Injudicious use of all three aminoglycosides has created the emergence of resistant strains of commonly occuring bacteria to these agents (21). The topical use of chloramphenicol has been implicated in cases of aplastic anemia (22). Sulfacetamide, tetracycline (achromycin), and erythromycin have a relatively low

incidence of toxity and hypersensitivity reactions. The use of any topical corticosteroids, including antibiotic and corticosteroid combinations, by anyone outside of ophthalmology, should be avoided (1,3,18,23,24).

In some acute care and general medical facilities, topical antibiotic drops are prone to overuse (17,18). Use of many of the commonly used topical ophthalmic drops can alter the clinical signs of the underlying ocular surface disease (16,25). They can aggravate some non-infectious causes of an acute or chronic red eye. Patients presenting with conjunctival hyperemia due to dry eyes, contact lens problems, hayfever conjunctivitis or recurrent corneal epithelial erosions can experience a worsening of symptoms from irritation caused by topical ophthalmic drops, most of which contain potentially toxic preservatives. This could further delay reaching the correct diagnosis and instituting the proper management.

Conclusion

In summary, making the correct diagnosis, possessing knowledge of the natural course of the disease, and understanding the potential benefits and risks of topical ocular therapy are necessary for the proper management of an acute or chronic red eye.

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Synchronous squamous carcinoma of the anus and adenocarcinoma of the rectum

STEVEN A. WESTON, M.D.*
Staff Surgeon, Gaston Memorial Hospital, Gastonia, N.C.

WILLIAM E. WHEELER, M.D., FACS*
Staff Surgeon, Upstate Carolina Medical Center, Gaffney, S.C.

Abstract

Recent literature has reported several series of synchronous adenocarcinoma of the colon, but there has not been a reported case of synchronous squamous carcinoma of the anus and adenocarcinoma of the rectum. This article describes a patient with a large squamous carcinoma of the anus along with a large adenocarcinoma of the rectum, and also discusses a current review of the etiology and treatment of squamous carcinoma of the anus.

Introduction

Squamous cell carcinoma of the anus has been described as a highly malignant tumor with a relatively poor prognosis. Much of the literature neglects to mention this tumor in favor of the more common adenocarcinoma of the rectum. It usually arises from the modified squamous epithelium of the anal canal (1).

Case Report

A 64-year-old white male was admitted to the Veterans Administration Medical Center in Huntington because of rectal bleeding, diarrhea, incontinence, dysuria, anorexia, and weight loss of one month's duration. The duration of rectal bleeding was unknown, but on repeated medical examinations elsewhere, he had been reassured the symptoms were from hemorrhoids. His family history was positive for carcinoma in three of four sisters; one each with breast carcinoma, colon carcinoma and metastatic carcinoma without a known primary.

Physical examination showed a cachetic patient with an enlarged, non-tender, smooth liver. Abdominal examination was otherwise unremarkable. Visual inspection of the anus revealed a firm, nodular area at the anal verge (Figure 1). Rectal examination revealed a large fungating, lesion at 5 to 6 centimeters with an enlarged prostate. Barium enema showed an annular carcinoma of the rectum. Flexible sigmoidoscopy with biopsy confirmed the lesion. Laboratory studies showed anemia, malnutrition, and slightly elevated liver function studies. CEA level was 48.2. CT scan of the liver was normal; however, a liver spleen scan was consistent with metastatic disease.

Figure 1. Photographic view of squamous carcinoma of the anus.

Exploratory laparotomy was performed with resection of the quadrate lobe of the liver, and an abdominoperineal resection. Examination of the specimen (Figure 2) revealed a 2.0 cm. raised lesion, 1.5 cm. distal to the anal verge. Proximal to the verge at 1.5 centimeters was a 5.5 cm. lesion. Microscopically, the proximal lesion was a mucin secreting, poorly differentiated adenocarcinoma and

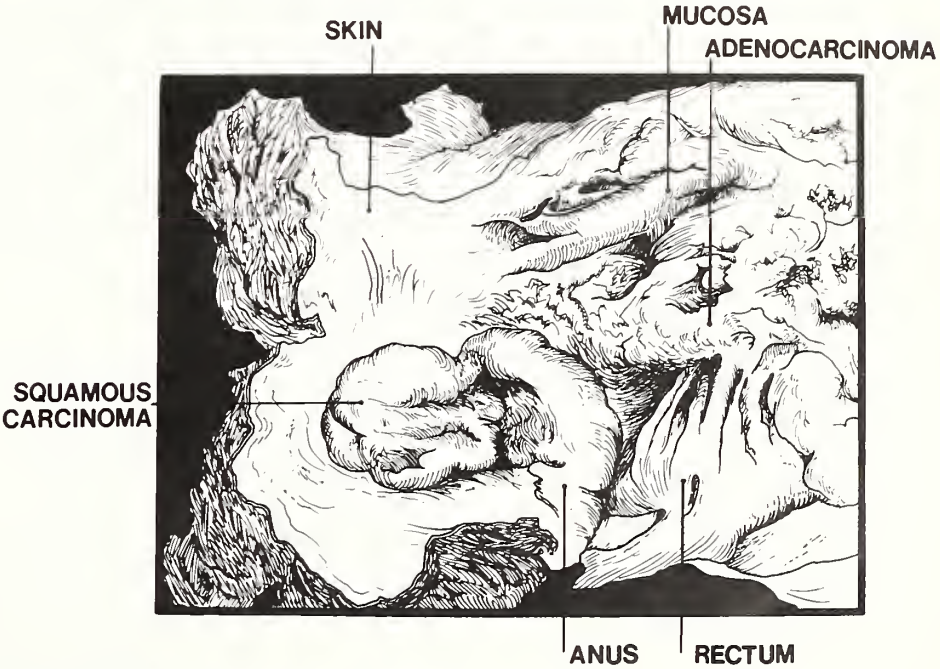

Figure 2. Schematic drawing of specimen.

Dr. Weston was formerly the chief surgical resident at the Marshall University School of Medicine, and Dr. Wheeler was previously an assistant professor of surgery at Marshall, as well as chief of surgical service for the VA Medical Center in Huntington.

the distal lesion was a moderately differentiated squamous carcinoma. This was confirmed by consultation with the AFIP. The liver metastasis was pure adenocarcinoma. Seven mesenteric lymph nodes were positive for adenocarcinoma.

Discussion

Squamous cell carcinoma comprises 2 percent - 4 percent of all carcinomas of the anus and rectum with most arising from the modified squamous epithelium of the anal canal (1). Richards and colleagues reported the incidence of squamous carcinoma of the colon to be 1 percent (2). Our review of the literature revealed it to be 2.5 percent (3,4). Unlike adenocarcinoma, the incidence of squamous carcinoma is more frequent among females (2,3). True squamous carcinoma of the large bowel proximal to the rectosigmoid is rare, with only 17 reported cases in the literature (7). Fifty-eight cases of pure squamous carcinomas of the colorectal region have been reported.

Symptoms include rectal pain (most common complaint), rectal bleeding, diarrhea, weight loss, hemorrhoids, constipation, and anal discharge (5). Cattel and William state that carcinoma may arise due to chronic irritation or an antecedent lesion (3). Microscopic examination of hemorrhoidal tissue at the Mayo Clinic has led to the detection of unsuspected squamous carcinoma. Grinvalsky and Helwig suggest that the anal ducts, which underlie the rectal mucosa and are believed to be appendages of the cloacogenic membrane, may be the source of tumors incorrectly termed squamous cell carcinoma (6). Cerezo and colleagues state that poorly differentiated areas of colonic adenocarcinoma should be carefully evaluated in an attempt to identify squamous features (9). However, only eight cases of squamous metaplasia in adenocarcinoma of the rectum have been recorded (10).

The coexistence of squamous cell carcinoma with adenocarcinoma may be suggestive of a common etiologic factor. Theories regarding the origins of colorectal squamous carcinoma include proliferation of uncommitted basal cell following injury, squamous metaplasia from chronic irritation, origin from embryonal nests, or squamous differentiation from an established adenoma of adenocarcinoma (11).

Pagana and fellow researchers reported the incidence of synchronous colorectal neoplasms to be 7.2 percent, but there have been no reports on the incidence of synchronous squamous carcinoma and adenocarcinoma of the colon (12). Patients with multiple gastrointestinal tumors are said to have a better prognosis than those with solitary lesions and there appears to be a high incidence of benign tumors in patients with multiple carcinomas (13,14). Bat and his colleagues reported a higher rate of obstructing lesions in patients with multiple carcinomas (15). A thorough preoperative examination should be a part of the evaluation of every patient with a large bowel neoplasm to rule out synchronous lesions.

Treatment of squamous cell carcinoma of the anal canal includes:

(1) Local excision (may be performed for early lesions or poor risk patients, but many local recurrences are noted).
(2) Abdominoperineal resection (five-year survival rate is 50 percent with a mortality rate of 5 percent) and increasingly radical operations do not improve survival.
(3) Radiation (five-year survival is 40 percent - 80 percent). Complications include radionecrosis, stricture, ulcerations and fistulas.
(4) Chemotherapy consisting of 5-FU and mitomycin C (MTC) with various radiation dosages (five-year survival rate of 80 percent).
(5) Multimodality therapy with a combination of radiation and chemotherapy (this results in the best response rates); and
(6) Abdominoperineal resection (should be reserved for residual and recurrent disease) (17).

Conclusion

The first report of a synchronous mucinous adenocarcinoma of the rectum and a squamous cell carcinoma of the anus has been presented along with a discussion of the etiology and therapy for squamous carcinoma of the anus. Little is known about the treatment or overall survival rate of patients with this type of synchronous lesions.

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Use double spacing throughout, including (in the following order) title page, abstract, text, acknowledgements, references, tables, and legends for illustrations. Begin each of the following sections on separate pages: title page, abstract, text, acknowledgements, references, individual tables, and legends for illustrations. Number pages consecutively, beginning with the title page. Type the page number in the upper right-hand corner of each page.

Articles contained on computer diskettes are acceptable and encouraged. Please contact the *Journal* in advance to determine the format type to be used. The conventional manuscript as described above must accompany the diskette.

All persons designated as authors should qualify for authorship. Each author should have participated sufficiently in the work to take public responsibility for the concept.

The second page should carry an abstract of no more than 150 words summarizing the manuscript.

Where reference is made to generically-designated drugs, the first such reference must be followed by parentheses containing the most commonly known trade-name drug of that designation. In addition, a listing of all generic drugs mentioned in the article, with their trade-name equivalents, should appear at the end of the article.

Tables (tabular listings) and figures (photos, drawings and charts) should be numbered and the point of reference in the text indicated in parentheses, i.e., (Table 1), (Figure 1).

Photos must be good-quality unmounted glossy prints usually 5 by 7 in. but no larger than 8 by 10 in. Black and white photos are preferred. Color photos will be printed in black and white. Cost of printing photos in excess of four will be billed to the author.

Each photo (figure) should have a label pasted on its back indicating the name, its number and an indication of its "top." A separate legend should be provided for each photo. Do not write on the back of photos, or scratch or mar them using paper clips. Do not mount them on cardboard. Drawings and charts should be done in solid black on pure white.

Number references consecutively in the order in which they are first mentioned in the text. Identify references in text, tables, and legends by arabic numerals (in parentheses).

No more than 25 references will be published free of charge to the author.

Use the style of references seen in this *Journal*, which is based on the formats used by the U. S. National Library of Medicine in *Index Medicus*. The titles of journals should be abbreviated according to the style used in *Index Medicus*. Consult "List of the Journals Indexed," printed annually in the January issue of *Index Medicus*.

All scientific material appearing in the *Journal* is reviewed by the Publication Committee. Manuscripts should be mailed to The Editor, West Virginia Medical Journal, Box 4106, Charleston, WV 25364.

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1. Ann Intern Med 1982;96:766-71.

West Virginia Chapter

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Carcinogenesis, Mutagenesis, Impairment of Fertility—A 2-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a 2-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a 2-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in 1 fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in 1 fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Worldwide, controlled clinical trials included over 6,000 patients given nizatidine in studies of varying durations. Placebo-controlled trials in the United States and Canada included over 2,600 patients given nizatidine and over 1,700 given placebo. Among the adverse events in these placebo-controlled trials, only anemia (0.2% vs 0%) and urticaria (0.5% vs 0.1%) were significantly more common in the nizatidine group. Of the adverse events that occurred at a frequency of 1% or more, there was no statistically significant difference between Axid and placebo in the incidence of any of these events (see package insert for complete information).

A variety of less common events were also reported; it was not possible to determine whether these were caused by nizatidine.

Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to 3 times the upper limit of normal, however, did not significantly differ from that in placebo patients. All abnormalities were reversible after discontinuation of Axid. Since market introduction, hepatitis and jaundice have been reported. Rare cases of cholestatic or mixed hepatocellular and cholestatic injury with jaundice have been reported with reversal of the abnormalities after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in 2 individuals administered Axid and in 3 untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of anti-androgenic activity due to nizatidine. Impotence and decreased libido were reported with similar frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Anemia was reported significantly more frequently in nizatidine than in placebo-treated patients. Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H_2-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental—Urticaria was reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity—As with other H_2-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. The ability of hemodialysis to remove nizatidine from the body has not been conclusively demonstrated; however, due to its large volume of distribution, nizatidine is not expected to be efficiently removed from the body by this method.

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Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalmic centers and release of posterior pituitary hormone.

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Indications: Yocon® is indicated as a sympathicolytic and mydriatric. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.[1,2] Also dizziness, headache, skin flushing reported when used orally.[1,3]

Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.[1,3,4] 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to ½ tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.[3]

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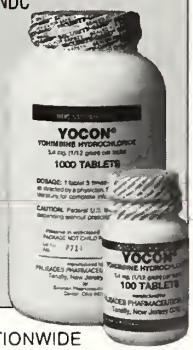

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President's Page

Constantino Y. Amores M.D.

Happy New Year?

I was on call in the Emergency Room at the General Division of CAMC on Christmas Eve and I saw a 17-year-old young man who certainly wasn't going to have a Happy New Year. He was permanently paralyzed from the neck down because he had been drinking and wrecked his car. It broke my heart: it devastated his parents.

Just before Christmas, I had addressed the seniors at South Charleston High School about the dangers of alcohol, drugs and driving. I was able to gain the attention of this seemingly invincible group by relating heartbeaking incidents of trauma, like the one I witnessed on Christmas Eve. They were shocked when I told them that there were more deaths and disabilities on the highways of America in one year, than there had been as a result of the Korean and Vietnam wars. They were just as surprised when I told them that 60 percent of these accidents on the highways involve drugs or alcohol; and that of these accidents, 75 percent result in either mental or physical disabilities that can affect the individuals for the rest of their lives.

It was obvious that these students never realized that most of the accidents I was taking about occurred mainly to young people like themselves. I could see their look of concern when I told them that trauma resulting from car accidents is the number one cause of death and disabilities for people ages 1 to 40. This alarming fact is being taken for granted by most of the American public as well because traffic accidents are so common in our everyday lives. We constantly see automobile fatalities on TV, read about them in the daily newspapers, and even predict a morbid tally every time there is a long weekend approaching.

We must not continue to be callous to this fact and the other statistics I have mentioned. These are preventable fatalities and disabilities and we should all be working together to stop this carnage on our highways, particularly the vulnerability of our youth.

Physicians should take the lead in this effort by promoting wellness and safety programs. We must volunteer our time to talk to local junior and senior high students about the dangers of alcohol, drugs and driving. In addition, medical societies need to be working with the various auxiliary chapters more to create programs which will reach these students before it is too late.

We need to request that our government officials take strong actions because the tragedies that are taking place daily on our highways are a national disgrace. Governor Caperton with his much publicized wellness program can help promote the importance of preventing automobile deaths and injuries. There is no need for a committee to study this issue — the statistics speak for themselves. Seat belt legislation must be passed, as well as laws to reduce speed limits and legal blood alcohol levels.

I would like to extend an invitation to our legislators to visit the Trauma and Rehabilitation Unit at the General Division of CAMC to talk firsthand to the victims of automobile accidents and what caused them. Perhaps it will give them a better impetus to take the necessary legislative measures.

Everyone seems to have the attitude that accidents only can happen to others, but the young quadriplegic and his family I saw Christmas eve, and hundreds of others I have seen in my medical practice know the harsh reality that this is not true.

Physicians, auxilians and legislators must work together to prevent further deaths and disabilities. The lives we save could be our own and those of our children.

—Constantino Y. Amores, M.D.

Medicine and General Motors

"Isn't it a shame," we hear "all those poor families now without a wage earner?" The topic is General Motors and its 20 percent reduction in force because of $15 million per day operating loss. Commentators make it sound almost as if the move is simply another malicious act on the part of a hateful corporate giant.

Such commentators are encouraged and applauded by the same group that has hobbled our corporate Goliaths by the multiple restraining threads of uncountable safety and environmental codes created and enforced by EPA, OSHA, union work rules and product liability court decisions.

We're not here to argue the merits of any of these. We simply point to their presence and their undeniable effects on product costs. For any given price, GM cannot produce a product of comparable quality or worth as that produced in a locale free of many of those prohibitive costs.

Somewhat similar is the problem we face in the American health care system. We face no foreign competitive product, but the price of our health care product is driven up by a variety of federally enforced regulations.

Once again, we will not argue or dispute the merits of safety and handicapped codes, nor of the multitude of quality assurance requirements we now must meet. We will only mention the increasingly comprehensive extent of handicapped definitions, requirements on health insurance companies to insure the previously held uninsurable and the lengthening list of coverages required of health care insurers in order to be licensed to sell any health care insurance.

We will, of course, take the opportunity to point out our product liability (malpractice) costs and the cost of our frantic efforts to avoid malpractice litigation (defensive medicine). And let us not overlook the opportunity to indict plaintiff attorneys, who, like the lilies of the field, " -- toil not, neither do they spin." These scavengers produce nothing, drive costs up astronomically for GM and for medical care, and profit enormously in the process.

Is it any wonder GM and health care have pricing problems? Can any other proposal for health care financing approach success without addressing the problems which plague our present system?

—SDW

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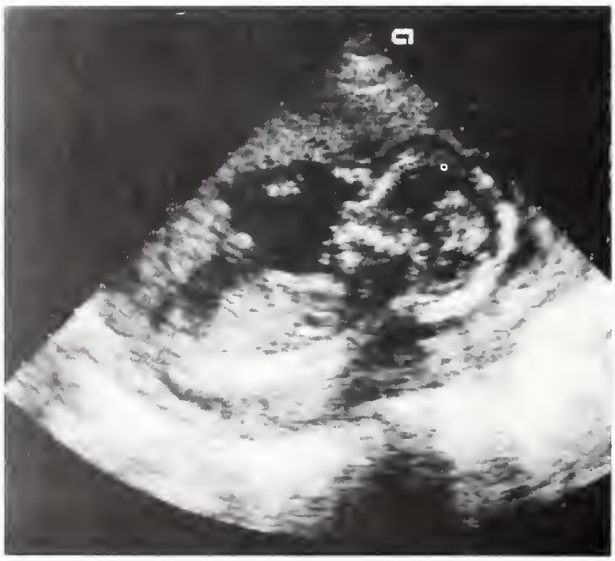

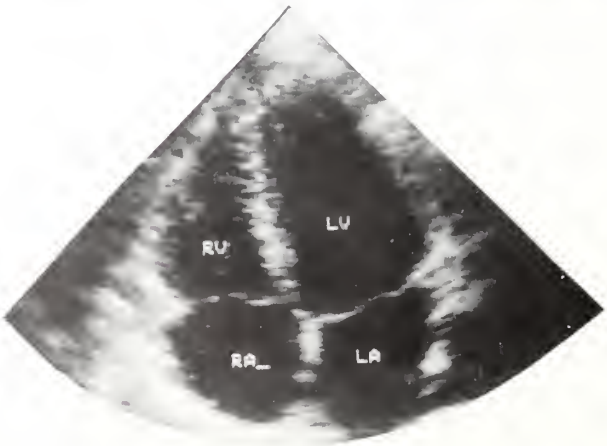

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At-Mid-Winter

First, third sessions to discuss wellness, dermatology

Holmes

Zedosky

Wallace

Young

Abraham

"A Healthier State" is the title of the First Scientific Session which will begin this year's WVSMA Mid-Winter Clinical Conference, to be held January 24-26 at the Radisson Hotel in Huntington. In addition, the Third Scientific Session, the only other session which had not been previously publicized, is entitled "Dermatology Update: Skin Cancer Diagnosis and Treatment in the 90s."

Scheduled to begin at 2 p.m. on Friday, January 24, the First Scientific Session will start with a presentation entitled "West Virginia Health Statistics - Passages: 1920 - 1990" by **Alan Holmes,** director of epidemiology and health promotion for the Bureau of Public Health. The next panelist will be **Lenore Zedosky, R.N., M.N.,** assistant director of the Office of Educational Support Services in Charleston, who will address the question of "How Can Schools and Health Care Providers Improve the Health of West Virginians?" The final speaker will be **William T. Wallace Jr., M.D., M.P.H.,** commissioner of the Bureau of Public Health in Charleston. Dr. Wallace's topic is "Wellness: The Case for Coalitions."

Moderators for this session will be WVSMA Councilor-at-Large **Derrick L. Latos, M.D.** and **John Holloway, M.D.,** one of WVSMA's representatives on the Healthy West Virginia Coalition.

Three speakers will also be featured for the Third Scientific Session which will begin at 2 p.m. Saturday with the lecture "MOHS Micrographic Surgery in the Treatment of Skin Cancer" by **Rodney F. Kovach, M.D.,** assistant professor at the West Virginia University School of Medicine. Following Dr. Kovach, **Elaine M. Young, M.D.,** of Huntington will discuss "Today's Melanoma — Yesteryear's Exposure: Update on the Diagnosis and Management of Melanoma." The final panelist will be **Nazem Abraham, M.D.,** of Huntington, who will speak on "Non-Melanoma Skin Cancers."

The moderator for the Third Scientific Session will be **Charles L. Yarbrough, M.D.,** president of the West Virginia Dermatological Society.

Biographical information about each of these speakers begins below and more details about the meeting are available by contacting Nancie Divvens at 925-0342.

First session panelists

Alan Holmes received a bachelor's degree in electrical engineering and a master's degree in business administration from West Virginia University, and then became a transmission and distribution planning engineer for Allegheny Power System in 1971. After five years with Allegheny Power, he accepted a position as the project research director for the Subcommittee on Utility Regulation for the West Virginia Legislature.

In 1977, Holmes went to work for the governor as his assistant for special studies and the following year he assumed the role of senior financial analyst for finance studies in the Office of the Governor. Also in 1978, Holmes served as the senior financial analyst for the certificate of need program in the Office of Health Planning and Evaluation, and then accepted a new role as director of the Health Statistics Center for the West Virginia Department of Health.

Holmes was promoted in 1988 to his current post as director of the Office of Epidemiology and Health Promotion for the Bureau of Public Health. In this role, he directs a staff of 100 employees in the Divisions of Health Promotion, Surveillance and Disease Control, and the Health Statistics Center.

A member of the board of directors of the American Lung Association, Holmes is a past president of the West Virginia Health Education Council and has been involved in many other state health organizations.

Lenore Zedosky graduated from the University of Maryland in College Park in 1965 with her

bachelor of science degree in nursing and relocated to Camden, S.C., to work as a staff nurse at Kershaw County Memorial Hospital. During the next 15 years in Camden, she held three other nursing positions, first as a pediatric nurse in a physician's office, and then as a school nurse and coordinator of school nurses for Kershaw County Schools.

In 1980, Zedosky moved to Charleston to become an assistant professor of nursing at the University of Charleston. Five years later, she was named the coordinator of school health services and health education for the West Virginia Department of Education. She assumed a new role in 1989 at the Department of Education as acting unit coordinator of student support services, and in 1991 was promoted to her present post as assistant director of the Office of Educational Support Services.

Zedosky has been very active in state educational endeavors and has served as a facilitator to the Governor's Task Force on Comprehensive School Health, program chairman for the West Virginia Adolescent Pregnancy and Parenting Conference, and as a member of the planning committee for the Governor's Children's Summit. Currently, she is chairman of the Subcommittee on Schools of the West Virginia AIDS Task Force, a board member of the American Lung Association of West Virginia, and co-chair of the Committee on Education for the Tobacco Control Coalition.

Dr. Wallace graduated from the University of Vermont with his medical degree in 1961 and completed a one-year internship at Methodist Hospital of Indiana in Indianapolis. From 1962-64, Dr. Wallace served with the U.S. Public Health Service Division of Indian Health at Hastings Hospital in Tahlequah, Okla.

In 1965, Dr. Wallace obtained a doctorate degree in tropical medicine and hygiene from London University and relocated to Ganta, Liberia, where he devoted himself to missionary medicine and public health for 11 years. During this time, Dr. Wallace earned a master's degree in public health from Johns Hopkins University School of Public Health and Hygiene.

Following his years in Liberia, Dr. Wallace returned to the U.S. and worked from 1976-90 in Concord, N.H., first as the director of the Bureau of Crippled Children's Services, then in three administrative roles for the Department of Health and Welfare. In October 1990, Dr. Wallace accepted his present position as commissioner of the Bureau of Public Health in Charleston.

(Continued on next page)

Faryna joins panelists for Physician Session

Alice Faryna, M.D., medical director for Medicare Operations for the Nationwide Insurance Company in Columbus, Ohio, has agreed to be a guest speaker for this year's Physician Session, "The Realities of the RBRVS," at the WVSMA Mid-Winter Clinical Conference.

The Physician Session will be held at 7 p.m., Friday, January 24, at the Radisson Hotel in Huntington, the site for all of the events for the Mid-Winter Clinical Conference. Dr. Faryna will lecture on "Physician Payment Reform: The Carrier's Perspective." The other panelists for this session will be Chester Stroyny, regional director for Region V of the Health Care Financing Administration; and Marc Segal, Ph.D., director of the Department of Health Care Financing and Organization for the AMA. Biographical information on Stroyny and Dr. Segal appeared in the October issue of the *Journal.*

Dr. Faryna is a native of Castile, N.Y., who received a B.A. degree in biology and her medical degree from the University of Rochester. After graduating from medical school, Dr. Faryna did a rotating internship at University Hospital in Salt Lake City and worked for two years as a staff physician at Longview State Hospital in Cincinnati.

Faryna

In 1960, Dr. Faryna relocated to Iowa City, Iowa, to complete an internal medicine residency and then returned to Ohio to go into private practice in Marion. Seven years later, Dr. Faryna conducted a research project in Chapel Hill, N.C., and then moved to Salt Lake City to be a staff physician at Neighborhood Health Center and a clinical assistant professor at the University of Utah.

Dr. Faryna was promoted to medical director of Neighborhood Health Center in 1972, but left the state two years later to become a staff physician at the VA Hospital in Martinez, Calif. In addition, from 1976-77, she also taught at the University of California in Davis.

In 1977, Dr. Faryna again came back to Ohio, and this time assumed the roles of medical director of Ambulatory Services at Miami Valley Hospital in Dayton and assistant professor at Wright State University. For the next 13 years, Dr. Faryna held a variety of academic positions at Wright State before assuming her current post in February 1990 as medical director of Medicare Operations for Nationwide Insurance in Columbus.

A member of the American College of Physicians, the Society of General Internal Medicine and the American College of Rheumatology, Dr. Faryna has written scientific articles and book chapters on topics such as primary care, rheumatoid arthritis and geriatric medicine.

First, third sessions

(Continued from previous page)

A fellow of the American College of Preventive Medicine, Dr. Wallace received the Ira Vaughn Hisock Award in 1990 for excellence in public health.

Third session panelists

Dr. Kovach graduated from medical school at WVU in 1978 and did an internship in diagnostic radiology and residencies in diagnostic radiology and dermatology at WVU Hospital. From 1982-83 during his last year of residency in dermatology, Dr. Kovach did a fellowship in Mohs micrographic surgery at the University of Wisconsin in Madison.

In 1983, Dr. Kovach accepted his current position as an assistant professor in the section of medicine at the WVU School of Medicine. In addition, since 1988, he has also been an assistant professor in the Department of Otolaryngology and Head and Neck Surgery at WVU; and for the past two years he has directed the Skin Cancer Unit at the Mary Babb Randolph Cancer Center in Morgantown.

Dr. Kovach is certified by the American Board of Dermatology and is a member of the American Academy of Dermatology, the American College of Mohs Micrographic Surgery and Cutaneous Oncology, and the American Society for Dermatologic Surgery.

Dr. Young is a native of Huntington who received a bachelor's degree in physical therapy from WVU and then did physical therapy residencies at Cleveland Metropolitan General Hospital and Charlotte Rehabilitation Hospital in Charlotte, N.C. Following her residencies, Dr. Young went to work as a physical therapist for the Wayne County Health Department and the Wayne County Board of Education.

In 1982, Dr. Young started medical school at Marshall University and after obtaining her degree, did a residency in dermatology at the University of Cincinnati College of Medicine. Dr. Young then returned to Huntington and opened a private practice in dermatology and joined the Marshall faculty as a clinical assistant professor.

Dr. Young is a diplomate of the American Board of Dermatology and has had several articles published.

Dr. Abraham received his medical degree from WVU in 1964 and did his residency in dermatology at Cincinnati General Hospital at the University of Cincinnati Medical Center.

A fellow of the American Academy of Dermatology, Dr. Abraham is a member of the AMA, WVSMA and the West Virginia Dermatologic Society. He is in private practice in Huntington.

Other Mid-Winter seminars, meetings

Thursday, January 23

"Surviving Reimbursement Reform" — A Coding and Billing Workshop for Physicians, Office Managers and Billing Clerks
Instructor: Harold Preston, vice president, Physicians' Practice Management, Charleston — 10 a.m. - 2:30 p.m.

WV Chapter, American College of Physicians
Registration and Reception — 5:30 - 7 p.m.
Break-out Sessions — 7 p.m. - 9 p.m.

Friday, January 25

WV Chapter, American College of Physicians Scientific Session
8 a.m. - noon

WVSMA Component Society and Specialty Society Presidents, and Executive Secretaries Luncheon — 11:30 a.m.

Reception — Sponsored by: WVU Alumni Association 5:30 p.m. - 7 p.m.

Saturday, January 26

WVSMA Committee on Medical Education Breakfast Meeting — 7:30 a.m.
WVSMA Young Physicians Section Breakfast Meeting — 8 a.m.
WVSMA Medical Student Section Meeting/Luncheon — 10 a.m.
WV State Society of Anesthesiologists — 11 a.m.
WV Academy of Ophthalmology Luncheon Meeting — noon
WV Chapter, American College of Physicians Council Luncheon Meeting — noon
WV Psychiatry Association — noon
WV State Neurosurgery Society Business Meeting — noon
WVSMA Cancer Committee Luncheon Meeting — noon
WVSMA Sports Medicine Luncheon Meeting — noon
Association of Local Health Officers of WV — noon
WVSMA Legislative Agenda — 1 p.m.
WVSMA 1992 Annual Meeting Program Committee Meeting — 4:30 p.m.
Family Medicine Foundation — 4:30 p.m.
WVAAFP Board Meeting/Dinner — 6 p.m.
Super Bowl Tailgate Party — Sponsored by: CNA Insurance Companies and McDonough Caperton Insurance Group — 6 p.m.
Entertainment: "Mind Over Magic" — 7 p.m. - 9 p.m.

Sunday, January 27

WVSMA Surgery Section Breakfast Meeting — 7:30 a.m.
WVSMA Council Luncheon/Meeting — 12:30 p.m.

Dr. Amores addresses students

WVSMA President Dr. Constantino Amores gestures as he poses a serious question to the students at South Charleston High School during his presentation for Drug and Drunk Driving Awareness Week. ***(Please see Dr. Amores' message on page 14 which relates to this address and the subject of car accidents caused by driving under the influence of alcohol and drugs).***

Workers' Compensation, HCX to study lost-time musculoskeletal injuries

To monitor the medical treatment provided to injured workers with lost-time musculoskeletal injuries, the most common type of work-related injury, the West Virginia Division of Workers' Compensation has joined forces with Health Care Excellence, Inc., (HCX) of Washington, D.C.

HCX will review hospitalization for all claims from admission through discharge, and will also aid in the case management of claims in which vocational rehabilitation is needed.

Twelve regional meetings are scheduled at the following times and locations to better explain the importance of the contract between Workers' Compensation and HCX:

January 22	- 9 a.m. - noon 1 p.m. - 4 p.m.	Cacapon Resort State Park, Berkeley Springs
January 28	- 9 p.m. - midnight 1 p.m. - 4 p.m.	Charleston Civic Center, Charleston
January 30	- 9 p.m. - midnight 1 p.m. - 4 p.m.	Ohio Valley Medical Center, Wheeling
February 3	- 9 a.m. - noon 1 p.m. - 4 p.m.	Pipestem Resort State Park, Pipestem
February 13	- 9 a.m. - noon 1 p.m. - 4 p.m.	Holiday Inn, Parkersburg
February 14	- 9 a.m. - noon 1 p.m. - 4 p.m.	Clarksburg/Bridgeport Holiday Inn

As a alternative to attending one of the meetings, informational packets can be obtained by request from HCX, Suite 600, 600 New Hampshire Ave., NW, Washington, D.C. 20037.

Two residents named to Publication Committee

Linn M. Mangano, M.D., a second-year resident at West Virginia University; and Clinton Hale Sutherland, M.D., Pharm. D., a second-year resident at Marshall University, have been selected to serve on the *West Virginia Medical Journal's* Publication Committee, chaired by Stephen D. Ward, M.D., of Wheeling.

Dr. Mangano is a native of Newell, W.Va., who graduated from the West Virginia University School of Medicine in 1988. Since graduation, Dr. Mangano has completed residencies in internal medicine and neurology at WVU, and currently is in her second-year as an ophthalmology resident.

Dr. Sutherland was born in Richlands, Va., and obtained a B.S. degree and his pharmacy degree from the Mercer University Southern School of Pharmacy in Atlanta. Following his graduation in 1983, Dr. Sutherland worked for three years in Grundy Va., as director of clinical pharmacy services at Buchanan General Hospital and as a store pharmacist. Dr. Sutherland then attended the Marshall University School of Medicine, where he is now a second-year resident in internal medicine.

Surgery Section to meet at Mid-Winter

The WVSMA Surgery Section will be holding a breakfast meeting at 7:30 a.m. on Sunday, January 26 in Ballroom E at the Radisson Hotel in Huntington during the WVSMA's Mid-Winter Clinical Conference.

Dr. Thomas Chang, chairman of the WVSMA Surgery Section, wants to encourage all interested physicians and other health care professionals to attend this meeting. The featured speaker will be Dr. Robert Gustafson, associate professor of surgery at the WVU School of Medicine, who will discuss "Chest Wall Deformities."

Attendance is limited, so please contact the WVSMA office at 925-0342 to register. Registrations will not be accepted after January 24.

Health Awareness Week

Auxiliary and WVSMA leaders gathered at the State Capitol in November for Governor Caperton's official proclamation of Health Awareness Week, November 17-23. Pictured from left to right are WVSMAA President-Elect Pacita Salon; Raleigh County Auxiliary President Joy Johnson; WVSMA President-Elect Dr. Robert Pulliam; Governor Caperton; WVSMA Executive Director George Rider; WVSMAA President Janie Altmeyer; WVSMAA Health Projects Chairman Jo Ann Cordell; Kanawha County Delegate Nancy Kessel, who is a member of the WVSMAA Long Range Planning Committee; WVSMAA Southwest Regional Director Judy Bofill; AMA-ERF Chairman Linda Elliott; Logan County Auxiliary Past President Trudy Tordilla; and Logan County Auxiliary President Siromani Bellam.

Orthopaedics Overseas offering fellowship abroad

Orthopaedics Overseas, a private voluntary organization, has announced a fellowship to provide an orthopaedic surgeon who has recently completed his/her training with an opportunity to learn about orthopaedic care and training in developing countries.

This fellowship, which will be awarded in April, will enable the physician to be sent to a program site staffed by a full-time medical director, who will serve as a preceptor. The fellow will be actively involved in the teaching of local medical personnel, serve for no less than six weeks, and submit a report upon return.

Applicants must have completed their orthopaedic training after January 1, 1991. The fellow will receive a round trip airplane ticket to the selected site as well as a stipend of $500 per month. Interested applicants should contact the Orthopaedics Overseas office at (202) 296-0928 for complete details.

Domestic violence hotline creates new physician service

In conjunction with the AMA's new initiative entitled "The Physician's Campaign Against Domestic Violence," the National Domestic Hotline has announced a new service called Physician's Reference.

Physician's Reference is a 24-hour toll-free number that can be accessed by health care providers nationwide who are working with battered women and/or those who care for them. By calling the National Domestic Violence Hotline at 1-800-333-SAFE and asking for the Physician's Reference desk, health care providers can speak directly with an advocate who will provide local community resources and assistance concerning victims of domestic violence.

The National Domestic Violence Hotline has been in operation since 1987. It remains the only national 24-hour, toll-free hotline for domestic violence in the country.

Applications being accepted for USP fellowships

Applications are now being accepted for the 1992-1993 United States Pharmacopeial Convention (USP) fellowship awards. Eight fellowships of up to $12,000 will be awarded.

Six awards are available to doctoral candidates or as post-doctorate awards for research projects related to the development or improvement of standards for drugs or drug products (analysis, stability, dissolution, biometrics, microbial controls, etc.) Two awards are available for research projects related to the development, dissemination, and use of information relating to drugs and related articles by practitioners, patients, and consumers.

A candidate's application must be endorsed by a faculty member who currently serves on the USP Committee of Revision or on a USP advisory panel (although the committee or panel member need not be the major professor supervising the fellow). Awards are made on an annual basis and fellows may reapply a second year. Applications must be postmarked no later than February 3.

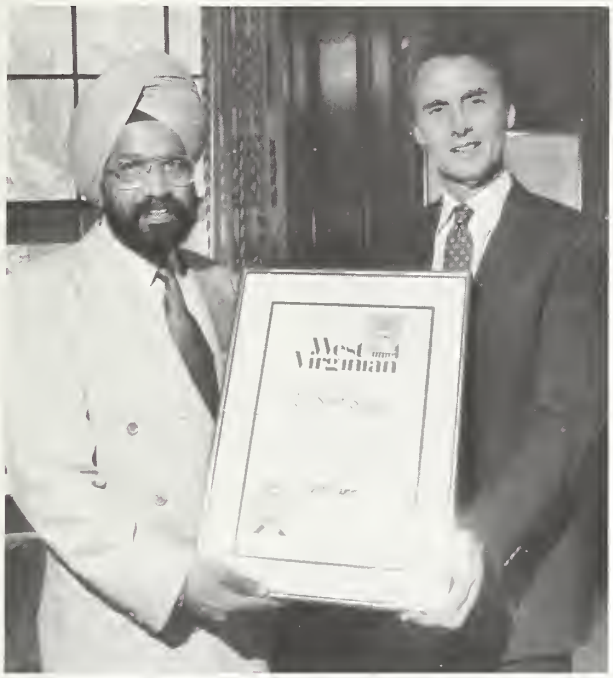
For more information on the USP Fellowship program, contact Anne Pendleton, USP Executive Office, at (301) 881-0666.

Texas Medical issues CME warning notice

The Texas Medical Association is in no way associated with any 1992 board review courses conducted by the Osler Institute of Terre Haute, Ind., and has not designated these activities for any type of CME credit of the Physician's Recognition Award of the AMA.

Physicians with questions or concerns about CME credit for 1992 board review courses which carry the Texas Medical Association's CME accreditation statement should contact: Carrie Laymon, TMA Medical Education Department, 401 West 15th Street, Austin, Texas, (512) 370-1446.

Dr. Singh honored



Dr. Sarjit Singh, president of the Hancock County Medical Society, was recently named a Distinguished West Virginian by Governor Caperton for the many contributions he has made to health care in the state.

Alumnus of the Year

Dr. James Bryant of Clarksburg was recently honored as the Alumnus of the Year for East Bank High School. Presenting Dr. Bryant with his plaque is Nancy Pat Maloney, president of the East Bank Alumni Association.

AABB to sponsor teleconferences

The American Association of Blood Banks (AABB) will be holding a nationwide audio teleconference, "Bone Marrow Transplantation (Autologous)," on February 12, and a video conference on March 16, regarding the administration of blood and blood components.

The audio teleconference will discuss the current rise of autologous bone marrow transplantation for the treatment of various types of cancer; bone marrow processing and cryopreservation techniques used in the laboratory manipulation of the marrow; and changes in the 14th edition of AABB's *Standards for Blood Banks and Transfusion Services.*

The one and a half hour video program will feature Dr. Edward Snyder, professor of laboratory medicine at the Yale University School of Medicine, discussing indications and contradictions for the use of red cells, platelets, fresh frozen plasma and cryoprecipitate in transfusion therapy; providing formulas for calculating dosages; and reviewing clinical situations affecting these outcomes. RN Janet Pavel, supervisor of donor services for the National Institute of Health, will describe pretransfusion preparations, blood administration and patient monitoring.

Fees for each teleconference are $20 for members and $30 for non-members.

For more information, contact the AABB Department of Education at (703) 528-8200.

Medical College of Virginia offers head/neck anatomy course

A four-day course, "The Alton D. Brashear Postgraduate Course in Head and Neck Anatomy," will be held in Richmond at the Medical College of Virginia, March 2-5.

Lectures and demonstrations will augment the laboratory work. The course is approved for 40 elective hours by the American Academy of General Practice and Academy of General Dentistry.

Further information may be obtained from Dr. Hugo R. Seibel, Department of Anatomy, Box 709, Medical College of Virginia, Richmond, Va. 23298.

Network of Ethics Committees plans annual symposium

"Solving the Health Care Crisis: Does Oregon Have the Answer?" is the theme for the West Virginia Network of Ethics Committees Fifth Annual Symposium, May 8 at West Virginia University.

The two featured speakers will be Dr. Ralph Crawshaw, a psychiatrist who is the founder and project director of Oregon Health Decisions; and Dr. Steven Miles, an internist and geriatrician from the University of Minnesota Center for Biomedical Ethics who is the ethics consultant on the Helga Wanglie case.

For more information, contact Dr. Alvin Moss at 293-7618.

Soon, your practice could be run from here.

Most people agree that the U.S. health care system needs significant change. And if a single-payor, national system is adopted, it will change.

Some proposals under consideration would put the government in charge of America's health care. That kind of radical change could affect your freedom to make decisions in administering patient care. It could affect the way you're compensated. And how you use medical technology.

If you find these kinds of changes hard to swallow, maybe you should support a proposal that will build on what's good about America's health care system. And change what's not. A plan like Health Access America.

Developed by the American Medical Association, Health Access America was designed to preserve the integrity of the system while improving programs like Medicare and Medicaid, and requiring employer-sponsored health plans.

So while there's still time, speak for yourself. Join the AMA's call for reform. Call 1-800-AMA-3211 for more information on Health Access America.

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Continuing Education

Listed on this page are some of the upcoming CME programs which will be held in the state.

The programs this month were compiled by: Patricia Barnhart, WVSMA loss control coordinator; and Robin Rector, coordinator of CME for Charleston Area Medical Center.

Further details about these CME activities may be obtained by calling Barnhart at 925-0342; and Rector at 348-9580. Other state and national meetings are listed in the Medical Meetings Section of the *Journal.*

If you would like to have the CME programs offered by your institution or association for physicians published in the *Journal,* please contact Nancy Hill, managing editor, at 925-0342.

West Virginia State Medical Association - Charleston

Jan. 24-26 - "WVSMA Mid-Winter Clinical Conference," Huntington.

CAMC/WVU Health Sciences Center - Charleston

Jan. 27 - "Hypertension Update," teleconference.

Feb. 3-5 - "Cardiovascular Conference at Snowshoe," 7 a.m. - 6 p.m., Mountain Lodge Conference Center, Snowshoe.

Feb. 8-9 - "Gastroenterology Update," 7 a.m. - 6:30 p.m., Canaan Valley State Park

Feb 10 - "Antepartum Testing Update," teleconference.

March 7 - "Introductory Elements of Preparing a Grant Proposal," 8 a.m. - 4:30 p.m., 4th floor, WVU Health Sciences Center.

Outreach Programs

Key to Sponsors

★ *WVU Health Sciences Center, Morgantown*

☐ *CAMC/WVU Health Sciences Center, Charleston*

Man ☐ Man Appalachian Regional Hospital, Jan. 21, 7 p.m., "Pediatric Surgical Problems," Eduardo Suson, M.D.

Montgomery ☐ Montgomery General Hospital, Feb. 5, 12:30 p.m., "Breast Reconstruction," Augusto Portillo, M.D.

Madison ☐ Boone Memorial Hospital, Feb. 11, 6:30 p.m., "Medical Care of Stroke Patients," Lee Pratt, M.D.

Point Pleasant ☐ Pleasant Valley Hospital, noon, "Medical Care of Head Trauma," John Schmidt, M.D.

Ripley ☐ Jackson General Hospital, Feb. 14, noon, "H-Flu Lab Diagnosis," Kevin Tu, microbiologist.

Spencer ☐ Roane General Hospital, Jan. 21, 12:30 p.m., "Family Resource Center Services," Susan Watkins, RN.

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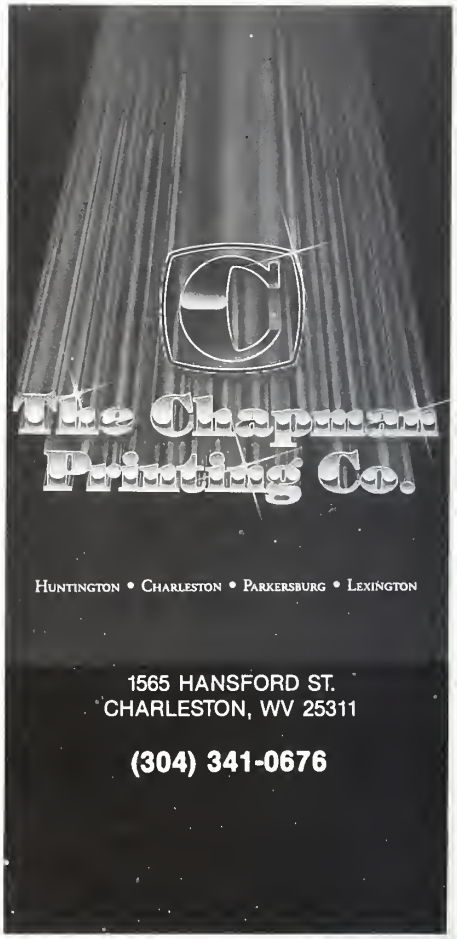
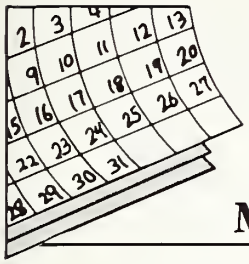




Medical Meetings

January

24-26—West Virginia State Medical Association's Mid-Winter Clinical Conference, Huntington.
27-29—Consensus Development Conference on Diagnosis and Treatment of Early Melanoma, National Institutes of Health, Bethesda, Md.
29-31—Southern Society for Pediatric Research, New Orleans.
31-February 2—1st Conference on Imaging in the Health Sciences, University of Texas, Houston.

February

10-12—Aging: The Quality of Life, Christopher Columbus Medical Sciences Committee of the National Institute of Health, Washington, D.C.
10-12—Beyond Deficiency: New Views on the Function and Health Benefits of Vitamins, New York Academy of Sciences, Arlington, Va.
12-16—National Update on Allergy and Clinical Immunology Conference, sponsored by National Jewish Center for Immunology and Respiratory Medicine, Keystone, Colo.
15-16—Infectious Diseases 1992: Current Problems, Ohio State University, Columbus.
14-16—American Academy of Cosmetic Surgery, Los Angeles.
17-19—Cardiopulmonary Rehabilitation Symposium: Status '92, Orlando.
20-25—American Academy of Orthopaedic Surgeons, Washington, D.C.
22-23—Gastroenterology Update, Ohio State University, Columbus.
23-28—Sixth Annual Innovations in the Diagnosis and Treatment of Gastrointestinal Disorders, sponsored by Georgetown University Medical Center, Snowmass, Colo.
28-29—High Risk Obstetrics: Obstetric Emergencies, Ohio State University, Columbus.

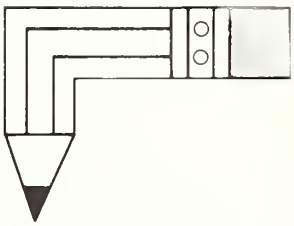
March

2-5—The Alton D. Brashear Postgraduate Course in Head and Neck Anatomy, Medical College of Virginia, Richmond.
4-7—Eighth Annual Symposium on Computerization of Medical Records in conjunction with the North American Conference on Patient Cards, New Orleans.
5-7—Strong Children for a Strong America: National Choices, Community Strategies, Children's Defense Fund Annual National Conference, Atlanta.

For More Information . . .

Contact the Journal for additional information about most of the above meetings. Call (304) 925-0342.

Poetry Corner



Tornado

As lightning flashed
In a clouded sky;
As thunder rolled
And winds were high,
A funnel cloud forming
Brought deep-felt unease
And a sense of foreboding
As it moved to the east.
In its path, all exploded
Then was scattered and strewn;
And the sky turned night black,
Though the time was high noon.
Rain poured in torrents
To add its own touch
In the total destruction;
And it all was too much
For full comprehension,
Or to know the dimension
Of what had so sudden
Been wrought by the storm.

E. Leon Linger, M.D.

Emptiness

I awoke in the night
From a dream,
With a fright
That you were gone
From my life;
No longer my wife.
I found emptiness there
As I looked at your place
In the bed that we'd shared;
No sound of your breathing,
No feeling of warmth.
Your pillow was vacant,
And it all seemed so wrong.
I couldn't believe;
Could it really be true?
Had my eyes been deceived?
Had I really lost you?
As my sleepy mind cleared,
The hard truth that I'd feared
Penetrated deep in my heart
With an unbelievable pain.
I never would hold you again.

E. Leon Linger, M.D.

Please address your submissions for Poetry Corner to: Stephen D. Ward, M.D., Editor, West Virginia Medical Journal, Box 4106, Charleston, WV 25364.

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- ☐ b. A dragon slayer.
- ☐ c. A genie.
- ☐ d. A knight in shining armor.
- ☑ e. A CPA.

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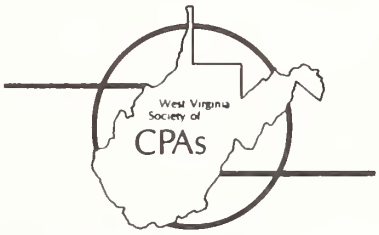

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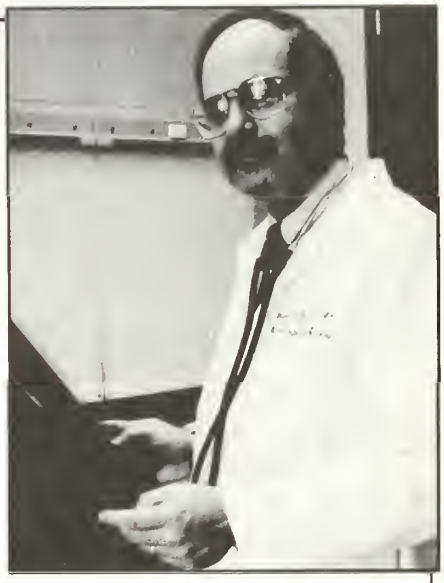

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Department of Health & Human Resources

Bureau of Public Health News

Special Note:
This is the first of an ongoing series from the West Virginia Bureau of Public Health to keep WVSMA members informed of the Bureau's activities. We hope you find it helpful and if you have any questions please call us.

William T. Wallace, M.D.
Commissioner

New office focuses on rural health

The new Office of Rural Health Policy (ORHP), has been established within the Bureau of Public Health through an executive order by Governor Gaston Caperton.

Mary J. Huntley has been named director of the office. She has worked in public health for a number of years, and most recently headed the West Virginia Perinatal Task Force.

With the help of a $39,000 grant from the U.S. Department of Health & Human Services, the ORHP will serve as a clearinghouse for rural health care information and initiatives. The programs of the office will be designed to improve the quality and access of health care services in rural West Virginia. This will involve the establishment of relationships between state, local and federal government, private and public health providers, the educational community and the business sector, as well as consumers interested in improving rural health care.

Among the programs Huntley will be involved in are the Essential Access Community Hospitals (EACH) Program and the Rural Health Initiative Act (RHI). EACH is a model program that links rural and urban hospitals in an effort to expand the availability of health services to West Virginians. The federal government recently awarded $1.4 million to seven West Virginia hospitals and the ORHP to implement the project. The RHI calls for at least six sites to be selected around the state to be used as primary health care education centers.

For more information, contact Huntley at 348-3210.

State receives funds for tobacco control

The Bureau of Public Health was recently awarded a $4.8 million, seven-year contract from the National Cancer Institute for community-based tobacco control interventions. The program is called America Stop Smoking Intervention Study for Cancer Prevention, or ASSIST. Contracts were awarded to 17 public health departments across the nation.

The primary objective of ASSIST is to accelerate the decline of smoking prevalence, in all ASSIST sites, to less than 15 percent of adults by the year 2000. The secondary objective is to reduce by 50 percent the number of new smokers among adolescents in all award sites by the year 2000. It is projected that more than 4.5 million extra adults will quit smoking and 2 million adolescents will be prevented from becoming addicted.

ASSIST will be carried out in the state through the West Virginia Tobacco Control Coalition. For more information, contact Sharon Lansdale in the Bureau's Division of Health Promotion at 348-0644.

Research program established for women, children

The Bureau recently established the Women and Children's Research and Evaluation Program as a joint initiative between the Division of Maternal and Child Health (MCH) and the Health Statistics Center.

The program was created to consolidate MCH research and evaluation expertise into one unit. The unit is responsible for the Pregnancy Risk Assessment Monitoring System (PRAMS), the Fetal-Infant Mortality Review Council (F-IMRC), the Sudden Death Infant Death Syndrome (SIDS) Research and Referral Program and other MCH epidemiology projects. In addition, the unit will consult with organizations around the state regarding the design and conduct of MCH research, with an emphasis on service and program-related research.

For more information, contact Timothy D. Dye at 348-5388.

Brochure offers medical waste disposal tips

The Bureau's Office of Environmental Health Services now has available a brochure explaining the safe way to dispose of household-generated infectious medical waste. "A Household Guide for the Proper Disposal of Syringes and Sharps," contains simple steps persons administering health care in their homes can follow when disposing of sharp objects and contaminated materials.

For more information, or to obtain a free copy, contact the OEHS at 348-2981.

Year 2000 goals set

"West Virginia Healthy People 2000," is scheduled for release in January. This document, produced by the Bureau, contains more than 60 objectives targeted to improve the health of West Virginians over the next several years.

This release marks the end of phase one of the project, the establishment of objectives, and the beginning of phase two, the development of implementation strategies. Now, expanded working groups will focus on developing community-based interventions and preventive programs and modifying existing service delivery mechanisms. Implementation strategies are being developed for release in spring 1992.

For more details, contact the Division of Health Promotion at 348-0644. To obtain a copy of "West Virginia Healthy People 2000," contact the Division of Local Health at 348-8870.

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WEST VIRGINIA UNIVERSITY HEALTH SCIENCES CENTER

Compiled from material furnished by the West Virginia University Health Sciences Center News Service, Morgantown.

Blaha named chair of Orthopedic Surgery Department

Dr. Blaha

John David Blaha, M.D., has been appointed chair of the Department of Orthopedic Surgery in the WVU School of Medicine.

Dr. Blaha has been a member of the WVU faculty since 1980, when he was named chief of the section of arthritis surgery. He also holds a graduate faculty appointment in the Department of Anatomy.

Dr. Blaha's clinical and research career has included considerable work on arthritis-related conditions and their treatment. He is experienced in joint replacement surgery, performing 150 to 200 operations a year, and has authored a number of papers and presentations on this topic.

"The main difficulty we have with joint implants is the interface between the implant, a metal and/or plastic piece of material, and the living bone and muscle of the body," says Dr. Blaha. "My research has been focused on the various means of fixing implants to bone."

Dr. Blaha has collaborated with other WVU scientists in developing mathematical means for measuring the migration of implants within the body after surgery, and developing new mechanical fittings that reduce migration. He is also working on a project to more accurately pinpoint the axis of rotation of the human knee joint — a crucial factor in designing more functional artificial joints.

A fellow of the American Academy of Orthopedic Surgeons, Dr. Blaha is a graduate of the University of Michigan College of Medicine, and the University of Notre Dame.

Surgeon appointed to five national posts

Dr. Murray

Dr. Gordon F. Murray, chairman of the WVU Department of Surgery, has recently been appointed to five national positions with professional organizations.

Dr. Murray was named president-elect of the Southern Thoracic Surgical Association, president-elect of the Thoracic Surgery Directors Association and chairman of the American Board of Thoracic Surgery's Thoracic Examination Committee. He was also named a member of the Residency Review Committee for thoracic surgery programs, and a Thoracic Surgery Directors Association representative for the Advisory Council on Cardiothoracic Surgery of the American College of Surgeons.

Dr. Murray has been instrumental in developing a regional open heart surgery program. In addition to chairing the Department of Surgery, he currently directs both the Cardiothoracic Surgery Residency Program and the combined cardiac surgery program of WVU Hospitals and Monongalia General Hospital, which he helped establish.

Professor participates in congressional press conference

Dr. Russell DeVore, WVU assistant professor of hematology/oncology, participated in the November press conference held in Washington, D.C. by Senator Jay Rockefeller and Representative Sander Levin (D-Mich.), to introduce two Medicare-related bills.

Under the bills, Medicare would pay the cost of anti-cancer drugs administered in capsule form, instead of only those given intravenously; and Medicare would extend coverage to drugs prescribed by a doctor for cancer treatment even though the FDA has not approved them for that specific purpose.

Visiting clinician publishes paper with faculty members

Dr. Karen Gross of Weirton is the first visiting clinician to publish a paper with WVU faculty members as a result of participating in the WVU Visiting Clinician Program.

"Occult Hereditary Spherocytosis and Human Parvovirus Infection" appeared in the November-December issue of The Journal of the American Board of Family Practice. The paper was written by Dr. Gross; Dr. Anne Cather Cutlip, an assistant professor of family medicine; and Dr. Michael Lewis, chairman of family medicine.

Three years ago as a resident at WVU Hospitals, Dr. Gross participated in the care of the patient referred to in the case report section of the article.

Four hospitals join medical data project

The WVU Health Sciences Center's CONSULT project, sponsored by the National Library of Medicine, recently placed computers, facsimile machines and telecommunications equipment in four Parkersburg-area hospitals to allow doctors and other health professionals direct access to medical journal articles and other information.

St. Joseph's Hospital in Parkersburg is the lead institution to join the the new system, which is intended to be a pilot project for development of a statewide network for health workers. The other hospitals sites are Jackson General, Ripley; Calhoun General, Grantsville; and Sistersville General, Sistersville.

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MU School of Medicine News

MARSHALL UNIVERSITY

Compiled from material furnished by the Office of University Relations, Marshall University.

Mood/Anxiety Center reopens; anxiety study planned

The School of Medicine has reopened its Mood and Anxiety Disorders Clinic, which provides patients with access to investigational drug treatments for anxiety, depression and related problems.

For its first new program, the clinic is seeking 30 to 35 patients who suffer from generalized anxiety, according to Dr. Leon McGahee, chairman of Marshall's Department of Psychiatry and head of the mood and anxiety disorders project.

The project will examine the effectiveness of Abecarnil, a new anti-anxiety product of Sandoz Pharmaceuticals Corporation. According to Dr. McGahee, Abecarnil appears to offer distinct advantages over conventional benzodiazepines because it does not appear to cause dependency, much sedation, and does not interact with other sedatives such as alcohol.

The program is open to people ages 18 to 65 with anxiety symptoms such as constant worrying, trembling and shaking, muscle tension, dry mouth, irritability and restlessness. Participants must not have a serious medical illness, and women must be using a reliable form of birth control.

Participants in the study will receive comprehensive medical and psychological evaluations and treatment at no charge. They will be followed through weekly clinics for the first six weeks of the program, and may also be able to continue with monthly clinics for an additional four months.

More information is available from the clinic at 696-7148.

Walker addresses Council of Deans annual meeting

Dr. Walker

Dr. Robert Walker, chairman of family and community health and a national authority on rural health issues, addressed the prestigious Council of Deans at the annual meeting of the Association of American Medical Colleges in November.

Dr. Walker was invited to speak on the education of medical students for rural practice. His topic, "A Third Year in Community-Based Primary Care," examined some of the innovative programs at the School of Medicine which are designed to attract more students into rural practice.

Other presenters to the Council of Deans included famed cardiovascular surgeon Dr. Michael DeBakey and Dr. Ruth Kirschstein, director of the National Institutes of General Medical Sciences.

"It is certainly an honor for the Marshall University School of Medicine to be represented by Dr. Walker at the AAMC meeting," said Dr. Charles H. McKown Jr., dean of the School of Medicine. "We are pleased to have a West Virginia physician on the program. The recent Kellogg grant and legislative initiatives attest to the prominent role our state will play in finding solutions to the complex issue of health care delivery in rural areas."

Dr. Walker serves on a panel for the Office of Technology Assessment, advising Congress on rural health issues. He is the author of two major reports on health care delivery prepared at the request of Governor Gaston Caperton and the Legislature. He was named West Virginia professor of the year in 1990.

Meet-the-Scholars award presented to Chertow for research

Dr. Chertow

Dr. Bruce Chertow, a professor of medicine and anatomy at Marshall, is this year's recipient of the university's meet-the-scholars award.

Selection committee chairman Dr. Kenneth Guyer said committee members were impressed by the volume and significance of Dr. Chertow's research.

"Dr. Chertow has made meaningful contributions to the understanding of diabetes, the relationship between vitamin D and abnormal parathyroid function, and the role of vitamin A in human health," said Dr. Guyer, associate professor of chemistry. "He discovered that vitamin A helps regulate the secretion of insulin from the pancreas, which is a highly intriguing finding. This knowledge should promote better understanding of the disease and possibly lead to ways to treat it more successfully."

Dr. Chertow returned this fall from a nine-month sabbatical at the Baker Medical Research Unit in Australia, where he underwent training in state-of-the-art molecular biology so that he can further study the connection between vitamin A and diabetes. He currently is directing a five-year, $500,000 federal study to determine how vitamin A deficiency may lead to abnormally low release of insulin or to problems in the growth of cells that release insulin.

In addition to being a professor of medicine and anatomy, Dr. Chertow is chief of endocrinology and metabolism at Marshall. He also serves as chief of nuclear medicine and chief of endocrinology at the Huntington VA Medical Center.

Dr. Chertow founded the West Virginia State Diabetes Control Program and has twice received the Distinguished Research Recognition Award at Marshall.

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Obituaries

Randolph L. Anderson, M.D.

Dr. Randolph L. Anderson, 93, of Charleston, died January 9, at home after a short illness.

Born in Richmond, Dr. Anderson received a B.S. degree from the University of Virginia and then obtained his medical degree from Harvard University. He interned at Boston Children's Hospital and Massachusetts General Hospital.

Dr. Anderson moved to West Virginia in 1933 and specialized in orthopedic surgery until his retirement. He had been a member of the WVSMA since 1934 and was also a member and past president of the Kanawha County Medical Society. In addition, he was a member of First Presbyterian Church in Charleston, the AMA, Lions Club and Sons of the American Revolution.

Survivors include his wife, Ruth Grove Anderson; daughters, Elizabeth Gorrell of St. Albans, Gretchen Cogar of Richmond, Va., Nancy Revercomb of Roanoke, Va., Ruth Zabre of Greenfield, Mass.; 10 grandchildren; and 14 great-grandchildren.

Samuel Biern Jr., M.D.

Dr. Samuel Biern Jr., 71, of Huntington, died January 5, in Cabell Huntington Hospital.

A graduate of the Johns Hopkins University School of Medicine, Dr. Biern interned at Strong Memorial Hospital and Newington VA Hospital in Rochester, N.Y. He was also a postgraduate fellow in medicine and dentistry at the University of Rochester School of Medicine and Dentistry.

Dr. Biern was a veteran of World War II, serving in the U.S. Army Signal Intelligence Corps in Africa and Italy. He had a private practice in internal medicine in Huntington and was also medical director of Presbyterian Manor. He served as chief of medicine at Cabell Huntington Hospital for five years, and founded and operated the Diabetes Clinic as medical director of Cabell Huntington Hospital from 1960 to the present.

One of the original charter founders of Contact of Huntington, Dr. Biern was a board member at Stella Fuller for many years. He was a member of Trinity Episcopal Church; the Huntington Rotary Club; Norvell Carter Medical Society; the AMA; Cabell County Medical Society; Masonic Lodge 53, A.F. & A.M.; Beni Kedem Shrine of Charleston; and Princeton Club of New York.

Surviving are his wife, Ann Akers Biern; three children, Charles Boisseau Biern of Annadale, Va., Ann Biern Piorun of Windham, N.H., and Janis Biern Bark of Huntington; two grandchildren, Casaundra Maximin-Biern of Annadale, Va., and Alexandra Kate Piorun of Windham, N.H.; one sister, Elsa Biern of Huntington; and cousin, Dr. Robert O. Biern of Annapolis, Md.

Del Roy Richard Davis, M.D.

Dr. Del Roy Richard Davis, 72, of Kingwood, died October 2, at Ruby Memorial Hospital in Morgantown.

Born in Kingwood, Dr. Davis obtained A.B. and B.S. degrees from West Virginia University, and completed one year of pre-med at the University of Wuerzburg in Germany as an exchange student. He graduated from Washington University Medical School in St. Louis, Mo., where he completed his internship at Barnes Hospital.

Dr. Davis was a U.S. Army veteran of World War II, who was wounded in 1944 and awarded the Bronze Star for bravery and a Purple Heart. Following his military service, he was a family practice physician in Kingwood and he established the Kingwood Clinic in 1964 with Dr. J. V. Gainer and later Dr. Fred Conley II. He retired from active practice in 1982 and served as public health officer of Preston County.

A past president and life member of the West Virginia Academy of Family Physicians, Dr. Davis served as a national AAFP delegate for the WV Chapter for 10 years. He received the Academy's highest honor, the "Mister Doc" award, in 1980. He was a diplomate of the American Board of Family Practice, served four terms as president of the Preston County Medical Association and was a member of the WVSMA.

Dr. Davis served two terms as Kingwood City Councilman and was general chairman of the Preston County Buckwheat Festival in 1982. In addition, he was a member of the Wesley United Methodist Church in Kingwood; the Kingwood Rotary Club; the VFW Post 826; the American Legion; the Fraternal Order of Eagles; and the Kingwood Volunteer Fire Department.

Survivors include his wife of 49 years, Marie Miller Davis; one son, Dick Davis Jr. of Kingwood; one brother, George W. Davis of Bloomington, Ind.; one sister, Elizabeth Ann Copen of Kingwood; and two granddaughters.

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(Signed) Nancy L. Hill,
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BRIEF SUMMARY

Contraindications: Severe LV dysfunction (see *Warnings*), hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no pacemaker is present), 2nd- or 3rd-degree AV block (if no pacemaker is present), atrial flutter/fibrillation with an accessory bypass tract (eg, WPW or LGL syndromes), hypersensitivity to verapamil.

Warnings: Verapamil should be avoided in patients with severe LV dysfunction (eg, ejection fraction < 30%) or moderate to severe symptoms of cardiac failure and in patients with any degree of ventricular dysfunction if they are receiving a beta-blocker. Control milder heart failure with optimum digitalization and/or diuretics before Calan SR is used. Verapamil may occasionally produce hypotension. Elevations of liver enzymes have been reported. Several cases have been demonstrated to be produced by verapamil. Periodic monitoring of liver function in patients on verapamil is prudent. Some patients with paroxysmal and/or chronic atrial flutter/fibrillation and an accessory AV pathway (eg, WPW or LGL syndromes) have developed an increased antegrade conduction across the accessory pathway bypassing the AV node, producing a very rapid ventricular response or ventricular fibrillation after receiving I.V. verapamil (or digitalis). Because of this risk, oral verapamil is contraindicated in such patients. AV block may occur (2nd- and 3rd-degree, 0.8%). Development of marked 1st-degree block or progression to 2nd- or 3rd-degree block requires reduction in dosage or, rarely, discontinuation and institution of appropriate therapy. Sinus bradycardia, 2nd-degree AV block, sinus arrest, pulmonary edema and/or severe hypotension were seen in some critically ill patients with hypertrophic cardiomyopathy who were treated with verapamil.

Precautions: Verapamil should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdosage. Verapamil may decrease neuromuscular transmission in patients with Duchenne's muscular dystrophy and may prolong recovery from the neuromuscular blocking agent vecuronium. It may be necessary to decrease verapamil dosage in patients with attenuated neuromuscular transmission. Combined therapy with beta-adrenergic blockers and verapamil may result in additive negative effects on heart rate, atrioventricular conduction and/or cardiac contractility; there have been reports of excessive bradycardia and AV block, including complete heart block. The risks of such combined therapy may outweigh the benefits. The combination should be used only with caution and close monitoring. Decreased metoprolol and propranolol clearance may occur when either drug is administered concomitantly with verapamil. A variable effect has been seen with combined use of atenolol. Chronic verapamil treatment can increase serum digoxin levels by 50% to 75% during the first week of therapy, which can result in digitalis toxicity. In patients with hepatic cirrhosis, verapamil may reduce total body clearance and extrarenal clearance of digitoxin. The digoxin dose should be reduced when verapamil is given, and the patient carefully monitored. Verapamil will usually have an additive effect in patients receiving blood-pressure-lowering agents. Disopyramide should not be given within 48 hours before or 24 hours after verapamil administration. Concomitant use of flecainide and verapamil may have additive effects on myocardial contractility, AV conduction, and repolarization. Combined verapamil and quinidine therapy in patients with hypertrophic cardiomyopathy should be avoided, since significant hypotension may result. Concomitant use of lithium and verapamil may result in a lowering of serum lithium levels or increased sensitivity to lithium. Patients receiving both drugs must be monitored carefully. Verapamil may increase carbamazepine concentrations during combined use. Rifampin may reduce verapamil bioavailability. Phenobarbital may increase verapamil clearance. Verapamil may increase serum levels of cyclosporin. Verapamil may inhibit the clearance and increase the plasma levels of theophylline. Concomitant use of inhalation anesthetics and calcium antagonists needs careful titration to avoid excessive cardiovascular depression. Verapamil may potentiate the activity of neuromuscular blocking agents (curare-like and depolarizing); dosage reduction may be required. There was no evidence of a carcinogenic potential of verapamil administered to rats for 2 years. A study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. Pregnancy Category C. There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. Verapamil is excreted in breast milk; therefore, nursing should be discontinued during verapamil use.

Adverse Reactions: Constipation (7.3%), dizziness (3.3%), nausea (2.7%), hypotension (2.5%), headache (2.2%), edema (1.9%), CHF, pulmonary edema (1.8%), fatigue (1.7%), dyspnea (1.4%), bradycardia: HR < 50/min (1.4%), AV block: total 1°,2°,3° (1.2%), 2° and 3° (0.8%), rash (1.2%), flushing (0.6%), elevated liver enzymes, reversible non-obstructive paralytic ileus. The following reactions, reported in 1.0% or less of patients, occurred under conditions where a causal relationship is uncertain: angina pectoris, atrioventricular dissociation, chest pain, claudication, myocardial infarction, palpitations, purpura (vasculitis), syncope, diarrhea, dry mouth, gastrointestinal distress, gingival hyperplasia, ecchymosis or bruising, cerebrovascular accident, confusion, equilibrium disorders, insomnia, muscle cramps, paresthesia, psychotic symptoms, shakiness, somnolence, arthralgia and rash, exanthema, hair loss, hyperkeratosis, macules, sweating, urticaria, Stevens-Johnson syndrome, erythema multiforme, blurred vision, gynecomastia, galactorrhea/hyperprolactinemia, increased urination, spotty menstruation, impotence.

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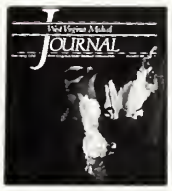

Front Cover

A downy woodpecker looks for a winter meal in a broken tree trunk at Twin Falls State Park in Mullins. Photo courtesy of *Scott Durham of Pineville.*

Characteristics and outcome variables of HIV cases at a university-based medical practice

ANTONIO L. ZARRAGA, M.D.
JAIME HERNANDEZ, M.D.
MAURICE A. MUFSON, M.D.
Department of Medicine, Marshall University School of Medicine, Huntington, WV

Abstract

An increasing number of AIDS cases occur each year in West Virginia despite its small urban population. From January 1984 to March 1991 at the Marshall University based multispecialty internal medicine group (the University Physicians in Internal Medicine), 66 HIV-infected persons were treated, most of whom are native West Virginians and always resided in the state. The study group consisted of 61 men and 5 women; four-fifths of the men are homosexual/bisexual and one-seventh used intravenous illicit drugs. Four women acquired infection heterosexually and one from transfusion. Twenty-eight patients never had any opportunistic infection (OI) and 38 experienced at least one OI, usually Pneumocystis carinii Pneumonia. About two-fifths of patients had CD4 counts less than 200 cells/cmm at their initial examination. Three-fourths of patients received AZT, six ddI, and most aerosolized pentamidine. Nineteen patients have died, all of whom suffered at least one OI. The mean interval until death from HIV infection and from AIDS was about 27 and 11.5 months, respectively.

Introduction

Human Immunodeficiency Virus (HIV-1), the cause of Acquired Immunodeficiency Syndrome (AIDS), appears to be reaching pandemic proportions. It is estimated that 8 million to 10 million people suffer infection worldwide. In the United States, the Centers for Disease Control (CDC) has reported a total of 174,893 AIDS cases since June 1981; and as of March 31, 1991, 110,530 persons have succumbed from the disease (1,2,3).

Until 1984, West Virginia appeared "free" of AIDS, notably because of its small size and relative isolation from mainstream urban turmoil and because the epidemiology maps of the CDC failed to show any cases in the state. Belshe reported the first two cases of AIDS in West Virginia in 1984, and both of these persons acquired the disease outside of the state (4). Since that time, however, the number of AIDS cases reported in West Virginia has steadily increased. The West Virginia Bureau of Public Health recorded the 100th case in September 1989; and as of December 1990, it reported a total of 181 cases of AIDS (5). Despite the mainly rural nature of the state, new AIDS cases occur regularly, not unlike the national pattern, except that the incidence rate of the disease is low. However, unlike the national pattern, homosexuality is the predominant risk factor in West Virginia. The two largest and most densely populated counties, Cabell and Kanawha, exhibit the highest number of AIDS cases (3).

In this report, we analyze the characteristics and outcome variables of HIV infection among persons treated at the Marshall University based multispecialty internal medicine group, to whom many AIDS patients are referred. The patient group for this study comprises about one-fifth of all AIDS cases reported in West Virginia until March 31, 1991. Many of these patients travel from diverse parts of the state for medical care; thus, the study group reflects the status of AIDS cases in the state at large.

Methods

All persons in this study were confirmed infected with HIV and all were treated at the Marshall University based multispecialty internal medicine group (the University Physicians in Internal Medicine). Sixty-six persons were included in this study with HIV confirmed by serologic tests for the virus, including enzyme immunoassay (ELISA) and Western Blot immunoelectrophoresis. Patients were enrolled between January 1984 and March 31, 1991, on the basis of at least one visit during that time interval.

The medical records of study patients were reviewed retrospectively. Nominal data were analyzed by the Chi-square contingency test (with Yates correction). The relationship of variables on outcome was analyzed by multiple regression analysis; excluded from this analysis were cases lacking data on CD4 counts.

Results

Of the 61 men and 5 women in the study group, 56 of the males are Caucasian, four are black and one is Hispanic. Of the five female patients, four are white and one is black. Their ages range from 21 to 58 years and the modal decade was 30-39 years, consistent with all cases reported in West Virginia and the national pattern.

AIDS in our community prevails as a disease of homosexual white males, who comprise about two-thirds of the group studied (Table 1). Moreover, 14 (21.2 percent of these men are bisexual. Only 9 (13.6 percent) of these patients are intravenous illicit drug users (IVDU). Two men claimed that they acquired infection from heterosexual relationships with prostitutes; but we lack

Table 1
Risk Factors of HIV Patients

Risk Factor	Number in Group	
	Male	Female
Homosexual	38	0
Bisexual	12	0
IVDU/Homosexual	4	0
IVDU/Heterosexual	3	0
IVDU/Bisexual	2	0
Prostitute Contact	2	0
Prostitute	0	1
Transfusion	0	1
Related IVDU/Bisexual	0	3

Table 2
Relation of Opportunistic Infection to Outcome in Patients with HIV

Number of Opportunistic Infections	Number Died/Total (Percent)		Average (Range) Months from First OI			
			Death in Fatal Cases		Alive in Survivors #	
None	0/28*	(—)	—		—	
One	7/20	(35)	7.2	(1-12)	18.6	(6-39)
Two	7/10	(70	15.5	(3-28)	10.6	(4-16)
Three	5/8	(63)	11.8	(1-19)	18.0	(17-20)

* Six patients in this group were lost to follow-up. The risk of death was directly related to the number of OI (Chi-square [Yates] = 19.43, df = 3, $p < 0.001$).
# Alive on March 31, 1991.

confirmation of this mode of spread as their only risk factor. Three female patients became infected by sexual encounters with IVDU/bisexual men (not apparently men in the study group).

To date, 28 (42.4 percent) of the 66 patients have not undergone a single opportunistic infection (OI); and six patients were lost to follow-up before March 1991. The mean time that these patients had lived without an OI was 33 months from the confirmation of HIV seropositivity to March 31, 1991 (the latest date of our analysis). Thirty-eight (57.5 percent) of the patients suffered one or more OI; 20 (30 percent) of the patients had one OI; 10 (15.2 percent) had two OIs, and 8 (12.1 percent) had three OIs. The mean survival time of patients who died with one or more OIs was 11.5 months from their first OI (satisfying the criteria for the definition of AIDS). By contrast, 19 patients with one or more OI who remain alive have survived an average 15.7 months (Table 2).

The most common OI was PCP, and Candida esophagitis ranked second. The other OIs included three cases of cryptoccal meningitis, three cases of toxoplasmosis of the central nervous system, five cases of cytomegalovirus (CMV) infection, and two cases of *Mycobacterium avium intracellulare* (MAI). Multiple OIs increased the risk of death. A single OI was associated with death in seven (35 percent) of 20 patients and among patients with two or three OIs, the case fatality rates were 70 percent and 62.5 percent, respectively. Multiple OIs significantly increased the risk of death (Chi-square [Yates] = 19.43, df = 3, $p < 0.001$) (Table 2).

Since T helper cells (CD4 cells) serve as the best single predictor of progression of HIV infection and AIDs, CD4 counts of the patients were analyzed at the time of their first examination. Of the 60 study patients for whom CD4 counts were available at their initial visit or shortly thereafter, 16 (26.6 percent) had CD4 counts of >500 cells/cmm; and all of these patients are alive. For the 16 (26.6 percent) of the patients whose CD4 counts were between 200 and 500 cells/cmm, two (12.5 percent) of these patients have died. Of the 28 (46.6 percent) patients with first visit CD4 counts of <200, 13 (46.4 percent) have died (Table 3). Twelve (92.3 percent) of these 13 patients who died had CD4 counts of < 100 cells/cmm shortly before death, and six (50 percent) of these 12 patients had CD4 counts <10 cell/cmm. The risk of death among these patients during the time period of the study was significantly inversely related to the CD4 count at the time of the initial visit (Chi-square [Yates] = 10.59, df = 3, $p = 0.005$).

When CD4 counts decrease to less than 400 cells/cmm, OIs ensue; and initial and repeat PCP infections most often develop in HIV infected persons when their CD4 counts fall below 200 cells/cmm (6,7,8). Only one (6.2 percent) of the 16 patients with CD4 >500 cells/cmm developed an OI, and that patient is still alive (Table 3). Four (25 percent) of the 16 patients with CD4 counts between 200 and 500 developed an OI and two have died; but more than four-fifths of this group remain alive. By contrast, among the group of patients with CD4 counts <200 cells/cmm, 27 (96.4 percent) had one or more OI and 13 (48.2 percent) of these 27 patients have died. Of the 14 living patients, eight have had CD4 counts less than 70 cells/cmm at their initial visit and their median survival time is 16.5 (range 6-37) months. In the interim, five of them had one OI, one had two OIs, and two had three OIs. All six patients for whom CD4 counts were not obtained have developed one or more OIs and four (66.6 percent) have died, suggesting that most of these patients also had very low CD4 counts when they had first sought medical care at our offices. Regression analysis of OIs and CD4 counts on survival resulted in a multiple correlation of 0.607, $F(2,51) = 14.91$, $p < 0.001$ (Table 3).

Table 3
Relation of CD4 Counts at Initial Visit and Outcome According to Occurrence of Opportunistic Infections

Number of Opportunistic Infections	CD4 Count (Cells/cmm)			
	>500	200-500	<200	No Data
None	0/15*	0/12	0/1	—
One	0/1	2/4	3/13	2/2
Two	—	—	6/8	1/2
Three	—	—	4/6	1/2

* Numerator = Died; Denominator = Total Cases.
Regression analysis of OI and CD4 counts on survival resulted in a multiple correlation of 0.607, $F(2,51) = 14.91$, $p < 0.001$.

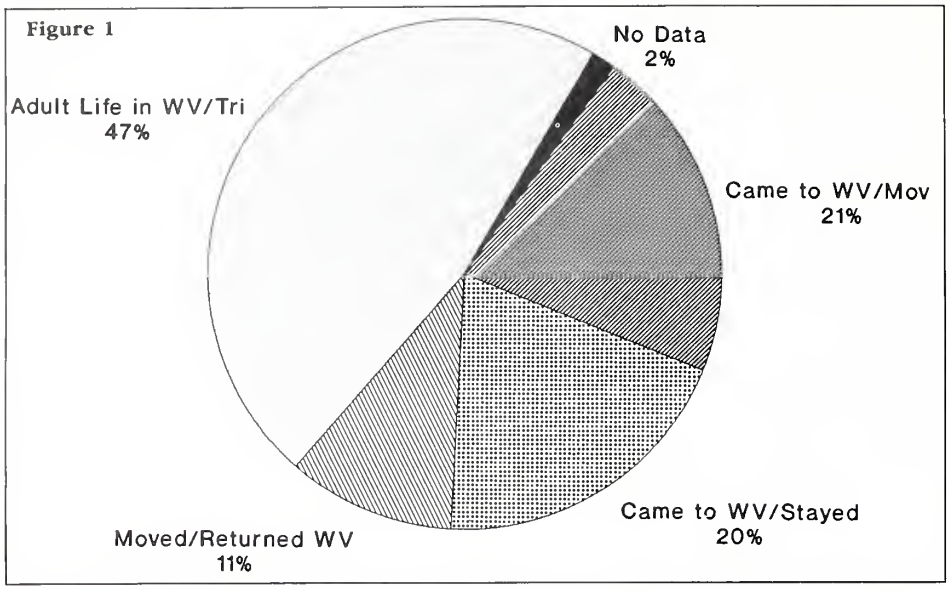

Figure 1. Patterns of migration to and from West Virginia among 66 persons infected with HIV treated at a university-based internal medicine practice.

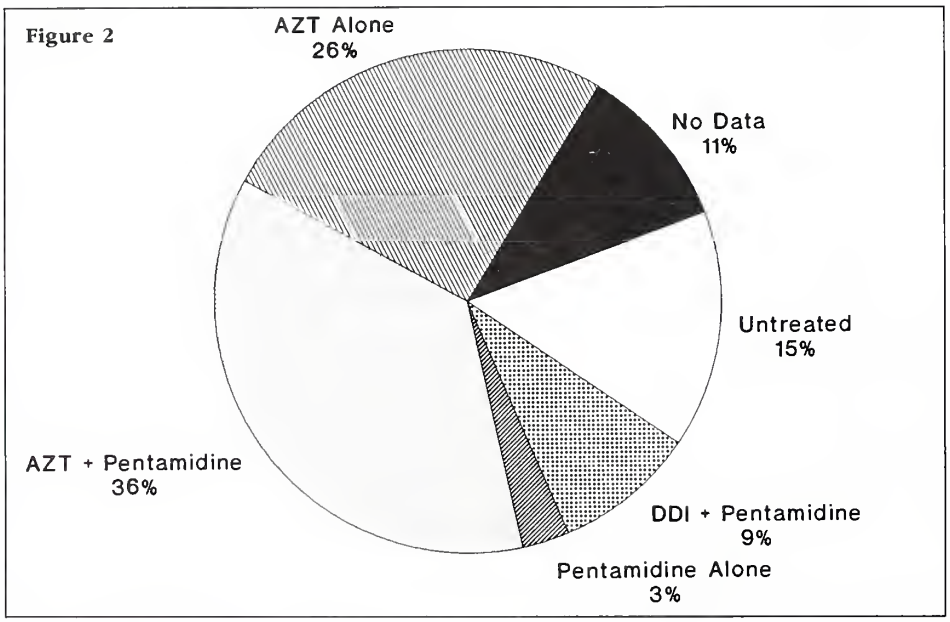

Figure 2. Regimens of anti-viral therapy and PCP prophylaxis among 66 persons with HIV treated at a university-based internal medicine practice.

Of the 66 patients in the study group, 31 (47 percent) have lived only in West Virginia their entire life, never leaving the state or Tri-State area of Huntington. Thus, these area residents mainly acquired HIV infection in the state. A similar number of patients were non-residents who moved to West Virginia (and either stayed permanently or moved again to another state). Only seven patients were West Virginians who moved from West Virginia and returned after they acquired HIV infection to be close to family and home during the course of their disease.

Many of the patients were office clerks and office personnel (Figure 1). Other occupations of the individuals studied included nurses, paramedics, medical technicians, businessmen, bartenders and hairdressers. A very few patients had been incarcerated for short periods of time and listed no occupation. No occupation also was recorded in 40.9 percent of the cases. About equal numbers of patients were on Medicaid, self-pay or private pay. One patient is on Medicare.

Ultimately all HIV patients require anti-viral therapy when their CD4 count falls below 500 cells/cmm, and prophylaxis of PCP with either aerolized Pentamidine or Bactrim when their CD4 counts fall below 300 cells/cmm. Forty-seven (71.2 percent) of the patients received anti-viral therapy with (30 cases) or without (17 cases) pentamidine prophylaxis (Figure 2). To date, 10 (15.1 percent) of the patients have not required treatment because their CD4 counts remain above 500 cells/cmm. Patients for whom no data was available on treatment were lost to follow-up before they met the criteria for initiating anti-viral therapy.

Discussion

This study was undertaken to examine the attributes and outcome of patients with HIV infection and AIDS, who represent a significant segment of the AIDS cases in West Virginia and were all treated by the same group of Marshall University-based physicians in Huntington. Due to the strategic geographic location of Cabell County and its considerable medical resources, many persons seek medical care in Huntington. Similarly, many persons with HIV infection come to Huntington and to the Marshall University School of Medicine for the special care they need, as well as for anonymity in delivering of this care (as required by West Virginia law).

Unlike the national patterns of HIV infection and AIDS, HIV infection among persons in West Virginia is a disease mainly of white, male homosexuals, almost one-half of whom acquired their infection in the state. Also, unlike other heavily populated states, we have a few HIV infections among IVDU. Although, HIV infection is rapidly lethal in our patients, their pattern of survival is somewhat better than for urban patients. Nearly one-half of the patients who had CD4 counts of < 200 cells/cmm at their initial

examination have died. However, the median survival time of the patients who remain alive and who have had CD4 counts <70 cells/cmm since their initial examination is about one and one-half years. This is a slightly longer time span than the reported median survival time of one year for an urban group of patients after their CD4 counts fell below 200 cells/cmm (9). The mean time from the first OI to death in our predominantly white male homosexual population was about one year, which is also slightly longer than the reported national median survival time of about 10 months for women and of about nine months for heterosexual men (10,11). The slightly longer survival times in these patients may represent intrinsic variation because of the small group size or they may reflect differences in host and immunologic factors.

Every resident of West Virginia should be aware that HIV infection exists in the state. Education aimed at warning of the risk of acquiring infection by engaging in unsafe sex should be a major part of the interventions of health care providers. Although heterosexual transmission is much more common in Africa and some parts of South America, it is a potential threat for persons in the United States also. Several of our patients likely acquired their HIV disease through heterosexual contact.

Essentially, AIDS is incurable and rapidly fatal. The available anti-retroviral therapy delays the onset of AIDS and prolongs survival (12). Prophylaxis and treatment of opportunistic infections has improved the quality of life for HIV-infected persons and prophylaxis of PCP may alone account for the observed increased survival times. However, many patients fail to tolerate the medications due to toxicity or side-effects. New anti-retroviral agents are being developed and these will be available in the near future (13). An effective vaccine will take several years to develop. Consequently, prevention of HIV infection ranks first for containing the disease.

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Medical Grand Rounds

West Virginia University Health Sciences Center

Edited by Irma H. Ullrich, M.D., Professor of Medicine, Section of Endocrinology

Hemophilia - An ancient disease with new problems and new solutions

Discussants:

JOHN S. ROGERS II, M.D.
Associate Professor of Medicine and Director of the Hemophilia Center

A. KIM RITCHEY, M.D.
Associate Professor of Pediatrics and Chief of Pediatric Hematology/Oncology

Abstract

A bleeding disorder occurring in brothers was described by Talmudic rabbis in 500 A.D. Hemophilia A is now known to be due to a sex-linked deficiency of plasma factor VIII activity. The isolation of factor VIII from plasma in lyophilized concentrate has provided effective treatment and resulted in significant health and economic benefits for individuals with hemophilia. Treatment associated viral hepatitis and HIV infection have spurred the development of serologic screening of blood donors and viral inactivation techniques which have resulted in improved safety of plasma derived concentrate. Knowledge of the gene for factor VIII has led to development of recombinant factor VIII concentrate, and provides promise for gene replacement therapy in the future.

The presence of the Human Immunodeficiency Virus (HIV) in plasma products exposed many individuals with hemophilia to the risk of developing the Acquired Immune Deficiency Syndrome (AIDS). Their medical care now includes testing for HIV exposure, AIDS risk reduction counseling, monitoring of immune parameters with prophylactic anti-HIV therapy for immunocompromised individuals, and treatment of opportunistic infections in those developing AIDS.

Case histories

A grandfather and grandson, both with severe (plasma level <1 percent) factor VII deficiency have contrasting clinical histories due to advances in the medical treatment of hemophilia.

The grandfather had numerous hospitalizations for hemarthroses, bleeding peptic ulcer disease and dental extractions. As a result of frequent hemarthroses, he developed degenerative arthritis involving his major joints and had right knee replacement surgery performed at age 49, limited mobility of the left ankle, and flexion contraction of the right elbow. Home infusion with factor VIII concentrate, begun at age 45, markedly decreased the frequency of hospitalizations. He was noted to have a white cell count of 3,300/mm^3, and a decreased T-helper/T-suppressor ratio (T4/T8) of 0.4, at age 49. At age 52, he died with bilateral interstitial pneumonia.

The grandson was diagnosed with severe hemophilia A at three months of age. When he was eight months old, he experienced his first hemorrhage in his left knee and was treated with cryoprecipitate. By 10 months of age, he had received the hepatitis B vaccine. He attended his first Comprehensive Hemophilia Clinic at WVU at one year of age, Between one and six years of age he had one to three hemorrhages per month which were treated with cryoprecipitate. Sometime between the age of two and three, he began home therapy with his mother being the infusionist. At the age of five, he was switched from cryoprecipitate to heat-treated factor VIII concentrate. When he was six years old, it was noted that he had an asymptomatic elevation of his AST which persists to the present time. His HIV antibody status is negative. Between the age of six and eight, he has had an increased frequency of joint bleeds with his left knee being the target joint. However, he is attending school full time with essentially normal activity.

An ancient disease

Talmudic rabbis recognized in 500 A.D. a bleeding disorder occurring in male siblings, and excused the third brother from circumcision (1). In 1840, Lane successfully transfused whole blood to treat a bleeding episode in an individual with hemophilia (2). In 1895, Wright (3) noted that the whole blood clotting time was prolonged in individuals with hemophilia, and in 1911, normal plasma was shown by Addis to correct the prolonged clotting time (4).

Today, we know that hemophilia is due to an inherited deficiency of plasma factor VIII activity. Factor VIII is a two-chain, metal-ion-stabilized complex, consisting of a heavy chain with two A and one B domains, and a light chain with one A and two C domains (5). The A domains are thought to be responsible for divalent cation binding. The C domains may comprise the phospholipid-binding portion of the molecule. In the presence of ionic calcium and a phospholipid surface, factor VIII acts as a co-factor for factor IX to increase the activation of factor X by greater than 10,000 fold. Factor VIII mRNA has been found in human liver, spleen, kidney and lymphocytes. Successful liver transplantation for viral induced liver failure has resulted in normal factor VIII production in individuals with hemophilia (6). The gene for factor VIII is at the tip of the long

arm of the X chromosome (5). There is no evidence for a single mutation site causing hemophilia. To date, point mutations involving single nucleotides as well as deletion of parts of the gene have been demonstrated (5). These mutations may be associated with either decreased synthesis of factor VIII or with functionally inactive factor VIII molecules.

Clinical course

Hemophilia occurs in 1 in 10,000 male births. It is a sex-linked recessive trait, with the disease occurring in affected males and the carrier state in affected females. In up to one third of these cases, there is no family history of the disease. The severity of the clinical course correlates with the decrease in plasma factor VIII. Severe hemophilia, factor VIII <1 percent, is associated with frequent, spontaneous musculoskeletal hemorrhages; moderate hemophilia, factor VIII 1 percent - 5 percent, is associated with bleeding with mild to moderate trauma; and mild hemophilia, factor VIII 5 percent - 30 percent, is associated with a fairly active and normal life with bleeding limited to surgery or other significant trauma.

Modern therapy

Factor VIII decreases rapidly in refrigerated whole blood, but is stable in fresh frozen plasma (FFP). However, large volumes of FFP are required to correct low plasma factor VIII levels. In 1964, Pool and associates (7) noted increased concentration of factor VIII and fibrinogen in FFP derived cryoprecipitate, providing a useful and effective treatment for hemophilia. Techniques of chemical precipitation of factor VIII in the late 1960s led to more highly purified, lyophilized factor VIII concentrate and introduced the era of home therapy (8). Effective treatment of bleeding episodes requires prompt correction of low plasma factor VIII levels, with repeat treatments as needed for persistent bleeding symptoms or to allow surgical healing. The plasma half-life of transfused factor VIII is 8 hours to 12 hours. Home infusion of factor VIII concentrate provides efficient, cost effective treatment for individuals with frequent bleeding episodes, i.e., severe hemophilia. A survey of 31 federally funded comprehensive Hemophilia Centers in 1985, noted significant human and economic benefits associated with comprehensive care and home infusion therapy (9). Over a 10-year period, the number of patients receiving regular comprehensive care and home infusion increased by 326 percent and 390 percent respectively. Over this same period, an associated 74 percent decrease occurred in overall medical costs per patient per year; an 83 percent decrease in average days per year spent as inpatients was noted; a 73 percent decrease in average days per year lost from work or school resulted; and there was a 74 percent decrease in the percent of unemployed adults (Table 1).

Table 1.

Benefits of Hemophilia Comprehensive Care Programs

	1975	1985
Patients receiving comprehensive care	1,333	5,683
Patients on self-infusion	514	2,517
Average days/year lost from work/school	14.5	3.9
Average days/year spent as in-patient	9.4	1.6
Medical costs/ patient/year	$31,600*	$8,127
Percent unemployed adults	36%	9.4

*adjusted for 1985 dollars.

Table 2.

Hemophilia and AIDS Historical Prospective

1979 - First case of AIDS in homosexuals
1982 - AIDS reported in patients with hemophilia
1983 - Heat treatment of factor concentrates
1984 - HIV - causative agent of AIDS
1985 - Universal blood donor screening

The availability of effective therapy improved both the quality of life and the average life expectancy of individuals with hemophilia (8). However, the presence of viruses in donated human plasma brought new problems with viral hepatitis and then Acquired Immunodeficiency Syndrome (AIDS). The development of screening tests for Hepatitis B and HIV antibody in blood donors decreased the risk of viral transmission through blood products. With the additional development of heat-activated factor concentrates, no new transfusion-related HIV sero-conversions have been reported in the United States in individuals with hemophilia since 1987. Newer methods of viral inactivation including heat pasteurization, solvent/detergent destruction of viral lipid capsules, high purification affinity chromatography, and gel chromatography techniques have further improved the safety of plasma derived factor concentrates.

Knowledge of the gene for human factor VIII has lead to the development of recombinant factor VIII. Human cDNA for factor VIII has been transfected into baby hamster kidney cell lines with secretion of human factor VIII into the tissue culture media and production of recombinant factor VIII concentrate (10). The in vivo recovery and elimination half-lives of recombinant factor VIII has been reported to equal or exceed plasma derived factor VIII with good clinical outcome with surgical procedures, serious hemorrhages and home infusion (10). Recombinant factor VIII is awaiting FDA approval.

Knowledge of the genes for factor VIII and factor IX promises future milestones in the treatment of hemophilia. Retroviral vectors have been utilized to transfer the human factor IX gene into normal human skin fibroblasts with subsequent transplantation of these fibroblasts into rats and mice. This was associated with the production of detectable plasma levels of human factor IX in these animals (11). The placement of normal human factor VIII and IX genes into somatic tissue from individuals with hemophilia appears possible.

Hemophilia and AIDS

The history of hemophilia management over the last few

decades has been a slow but steady progress toward normality. However, the first case of Acquired Immunodeficiency Syndrome (AIDS) in a patient with hemophilia in the early 1980s brought this progress to an abrupt halt. Both patients and caretakers were ill-equipped to deal with this new problem. AIDS and the threat of AIDS had a tremendous impact on every aspect of the hemophilia community.

History

As outlined in Table 2, the first cases of AIDS in homosexuals were documented in 1979. This was initially a baffling disorder characterized by deterioration of the immune system with subsequent opportunistic infection and malignancy with a high fatality rate. Risk groups were rapidly identified and the infectious nature of this disorder became evident. In 1982, the first patients with AIDS who had hemophilia but no other risk factors were diagnosed. This combination of unique problems was the first suggestion that blood products could serve as vehicles for transmission of the putative infectious agent. This also began the long and hard look at the products used to treat patients with hemophilia. The preparation of one lot of factor VIII concentrate required as many as 20,000 donors, many of whom were paid donors with known risk factors for AIDS. It also became clear that patients using the most factor were most likely to acquire AIDS.

In 1983, heat-treated factor VIII concentrate became available. Heat treatment was originally designed to kill hepatitis virus and it was hoped that this treatment would also kill the agent of AIDS as well. In 1984, Human Immunodeficiency Virus (HIV) was identified as the causative agent of AIDS, and soon it was shown that specific types of heat treatment did indeed kill this virus.

In 1985, universal blood donor screening for HIV was instituted. This consisted of both a historical screen as well as a specific HIV antibody test. Using these screens together, it is estimated that the risk of infection from a unit of blood is between 1 in 100,000 to 1 in 1,000,000 (12). Since 1985, there has been continued refinement of the manufacturing process for factor concentrates. This has resulted in a product with improved safety, but has resulted in a period that proved very trying to patients with hemophilia and their caretakers, because of occasional critical shortages of factor for treatment.

Current status

As of December 31, 1990, there have been 1,617 cases of AIDS diagnosed in the hemophilia population (13). This number represents only 1 percent of the total cases of AIDS in adults and adolescents. Children with hemophilia and AIDS under the age of 13 represent 5 percent of childhood cases. Approximately 8 percent of the entire hemophilia population in the United States has been diagnosed with AIDS.

The overall prevalence of HIV infection in the hemophilia population is approximately 50 percent (14). However, it is clear that both the type of hemophilia that a patient has, as well as the severity of hemophilia, impacts on the prevalence of HIV in that subpopulation. Fifty-six percent of patients with hemophilia A are seropositive for HIV while 31 percent of patients with hemophilia B are seropositive. Patients with severe, moderate, or mild hemophilia A have a seropositivity rate of 70 percent, 49 percent, or 20 percent, respectively. Severity of hemophilia correlates with use of factor VIII concentrates with the most severely affected patients receiving the most factor and thus having the greatest exposure.

HIV's impact on comprehensive hemophilia care

Realization of the widespread nature of the HIV infection brought about a dramatic change from an optimistic outlook with the prospect of a long and productive life to one of impending doom. Patients with hemophilia and their families now had to face new struggles. These problems included the fact that children had to deal with acceptance in school; adolescents had to deal with an emergent sexuality complicated by possible HIV infection; and adults had to address concerns regarding spread of infection to their spouse, their decision to have children, and acceptance at their place of work. In the early years, many caretakers were not recommending HIV testing because of the stigma attached to this finding by society, as well as the fact that no treatment was available. Patients were told to assume that they were HIV positive.

Fear of future infection by the factor VIII concentrates resulted in changes in treatment patterns. Well-established rules of early treatment to prevent future disability were now being questioned. Many bleeds, unfortunately, were left untreated. Elective surgeries were canceled. Many were worried that all of the gains of modern hemophilia treatment were being reversed.

There was also a significant change for the role of the comprehensive care team. The hematologist now had to become well versed in infectious diseases, public health issues, individual and family counseling, and public relations. The hemophilia nurse had to deal with many of these same issues, as well as becoming a logistics expert during the times of critical factor shortage. Dentists and orthopedic surgeons had to become familiar with the risks of HIV in their practice, and many problems that had previously been handled surgically were handled medically or not at all. The social worker's role, though, has probably changed the most dramatically due to the increase in counseling time. At West Virginia University, our social worker has become the coordinator of the AIDS Risk Reduction Program for our hemophilia population.

HIV risk reduction and management

As a result of the HIV epidemic, many new components have been added to standard comprehensive hemophilia management:

1. **Screening** - We now recommend and provide HIV testing for all patients who have been exposed to blood products. This change in recommendation is a result of the availability of treatment for the disease. We

also recommend screening of all sexual partners of hemophilia patients. Pre and post-test counseling are critical elements that are incorporated into this aspect of hemophilia care.

2. **Monitoring** - Patients who are HIV negative yet continue to receive blood products are monitored on a yearly basis. Patients who are HIV positive are monitored biannually with CD4 (T4) lymphocyte enumeration. As this count approaches critical levels, the testing is performed more frequently.

3. **Treatment** - Patients with a CD4 count of less than 500 are treated with AZT or DDI if AZT proves intolerable. Prophylaxis for pneumocystis infection begins when the CD4 count drops below 200. Management of any of the manifestations of AIDS are handled in consultation with infectious disease experts and others. There are many different levels of counseling within the comprehensive care team. The social worker is the leader, but all members contribute. There is individual patient counseling regarding the impact of HIV on his/her personal life, family life, decision to have children, and sexual practices. There is family counseling for individual members as well as couples and groups.

4. **Education** - Education has always been a critical element in comprehensive hemophilia care, but now must include education about HIV. This education must be extended to the patient with hemophilia, his/her family, sexual partners, school teachers, administrators, employers, and medical professionals.

Current trends

The number of new cases of AIDS, as well as the number of deaths from AIDS within the hemophilia population, have decreased over the last few years (13). The significance of this is unclear. There is a longer lag time for HIV-positive patients with hemophilia to develop symptoms of AIDS than for other risk groups. Furthermore, the decrease in case reporting may be a result of the beneficial effects of AZT and pneumocystis prophylaxis in delaying symptom onset. Although it is encouraging to see a decrease in the number of cases, there is still a 50 percent HIV seropositivity rate within the hemophilia community, so many new cases of AIDS have yet to be diagnosed. Hemophilia caretakers are also carefully watching the incidence of AIDS within heterosexual partners of patients with hemophilia as well as perinatal transmission. It is hoped that both of these situations can be prevented by AIDS risk reduction programs.

The current statistics regarding HIV in the pediatric and adolescent hemophilia population (under 21 years old) at WVU are hopeful. While 33 percent of this group are HIV positive, there are no patients under the age of 15 years who are HIV positive. Furthermore, nationwide there have been no new cases of HIV seroconversion in newly diagnosed hemophiliacs since 1987. So, for the newly diagnosed child with hemophilia and his/her family, the decade of the 90s begins with the same sense of optimism that was present at the beginning of the last decade prior to the tragedy of AIDS.

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Manuscript Information

Manuscripts to be presented for publication in the *West Virginia Medical Journal* should be prepared in accordance with "Uniform Requirements for Manuscripts Submitted to Biomedical Journals" (1) (International Committee of Medical Journal Editors).

The *West Virginia Medical Journal* will not consider for publication a paper or work that already has been reported in a published paper, or is described in a paper submitted or accepted for publication elsewhere.

Manuscripts, accompanied by one copy, should be typewritten, double-spaced, on one side only of white bond paper (8½ by 11 in.), with margins of at least one inch.

Use double spacing throughout, including (in the following order) title page, abstract, text, acknowledgements, references, tables, and legends for illustrations. Begin each of the following sections on separate pages: title page, abstract, text, acknowledgements, references, individual tables, and legends for illustrations. Number pages consecutively, beginning with the title page. Type the page number in the upper right-hand corner of each page.

Articles contained on computer diskettes are acceptable and encouraged. Please contact the *Journal* in advance to determine the format type to be used. The conventional manuscript as described above must accompany the diskette.

All persons designated as authors should qualify for authorship. Each author should have participated sufficiently in the work to take public responsibility for the concept.

The second page should carry an abstract of no more than 150 words summarizing the manuscript.

Where reference is made to generically-designated drugs, the first such reference must be followed by parentheses containing the most commonly known trade-name drug of that designation. In addition, a listing of all generic drugs mentioned in the article, with their trade-name equivalents, should appear at the end of the article.

Tables (tabular listings) and figures (photos, drawings and charts) should be numbered and the point of reference in the text indicated in parentheses, i.e., (Table 1), (Figure 1).

Photos must be good-quality unmounted glossy prints usually 5 by 7 in. but no larger than 8 by 10 in. Black and white photos are preferred. Color photos will be printed in black and white. Cost of printing photos in excess of four will be billed to the author.

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Number references consecutively in the order in which they are first mentioned in the text. Identify references in text, tables, and legends by arabic numerals (in parentheses).

No more than 25 references will be published free of charge to the author.

Use the style of references seen in this *Journal,* which is based on the formats used by the U. S. National Library of Medicine in *Index Medicus.* The titles of journals should be abbreviated according to the style used in *Index Medicus.* Consult "List of the Journals Indexed," printed annually in the January issue of *Index Medicus.*

All scientific material appearing in the *Journal* is reviewed by the Publication Committee. Manuscripts should be mailed to The Editor, West Virginia Medical Journal, Box 4106, Charleston, WV 25364.

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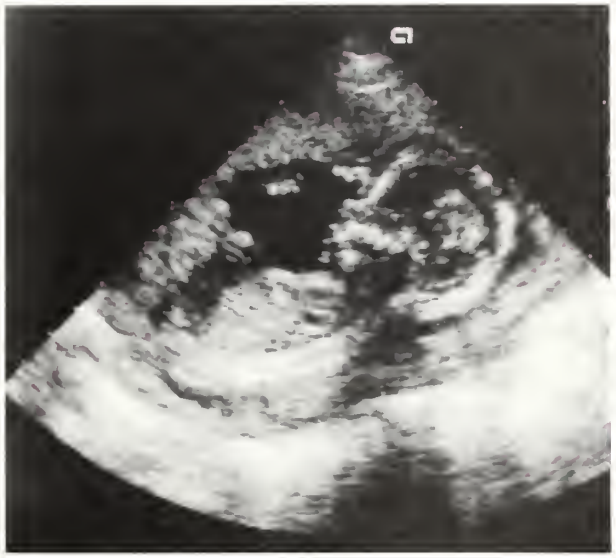

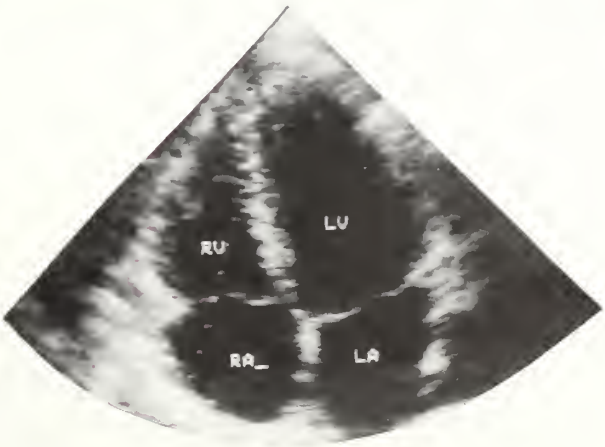

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President's Page

Constantino Y. Amores M.D.

Medicine at its best?

I was on call recently when I was notified on my beeper that the HealthNet helicopter was flying in a 12-year-old boy with multiple trauma injuries to the Emergency Room at General Division of CAMC.

When I arrived at the Emergency Room, a swarm of "specialists" were working frantically to save this boy's life. One nurse was starting an I.V., another was checking his blood pressure and a third was giving him medicine in the I.V. that the paramedics had immediately put into place. A physician was intubating the boy, a respiratory therapist was attaching him to a respirator, and an x-ray technician was preparing the portable x-ray machine.

By the time he was wheeled to the operating room just a short time later, his leg was set in a cast, a chest and peritoneal tap tube had been inserted, and a CT scan had been performed. As I prepared to perform a craniotomy to relieve the child's epidural hematoma, another team of skilled individuals were already swiftly on the job. The neurosurgical nurse was lining up the instruments, the nurse anesthetist was checking to make sure the boy was properly sedated, the physician's assistants were consulting with me about the patient's history and physical examination, the operating room technician was readying the Mayfield head holder, while the circulating nurse and head of anesthesiology were attending to many other special details.

Teamwork like this helps keep American medicine at its best. Patients in any type of emergency situation expect and demand perfection from all medical personnel involved and they should.

Is the birth of a child any less important?

I ask this question because I find it difficult to comprehend why in the world a bill to license lay midwives was given so much consideration by the West Virginia Legislature.

Just as it would be wrong for one of my physician's assistants to perform the neurosurgical operation on the young patient I just described, it is not proper for a lay midwife to deliver babies without a qualified physician present in an appropriate hospital setting.

I think it is important that the decision makers in state government know - - THIS WAS NOT A TURF BATTLE, BUT AN ISSUE OF QUALITY OF CARE.

Granted, the obstetricians and family practitioners in West Virginia who deliver babies have their hands full because there are not enough of them practicing in the state. The answer however, is to attract more of these types of physicians into the state, as well as retain those graduating from medical school, instead of considering laws like SB 125 which do just the opposite.

In addition, while the legislators have been focusing all of this attention on the lay midwife issue, they should have been spending their time discussing other pressing health care issues, such as tort reform and the medical malpractice crisis. A major reason for the shortage of obstetricians in this state is the simple fact that many have dropped obstetrics from their practices because of excessive malpractice awards, and many have moved out of the state because of this situation.

One hundred and twenty-five years ago, Dr. James Edmund Reeves founded the WVSMA in an effort to elevate the standard of practical medicine and surgery in West Virginia. I am very pleased that our legislators realized before it was too late, that this bill would have been a step backwards, not forward for obstetrical care in West Virginia.

Constantino Y. Amores, M.D.

Ugly Duckling

We try to have balance in the *Journal* and sometimes that is very difficult. Invariably, it seems, every year at this time we reflect editorially on the various inanities enjoying serious consideration as they are massaged by the defective logic of whatever administration officials and groups of legislators happen to be laboring in office at the moment.

There appears to be no lack of opportunities for such reflections this year, but, purely in the interest of editorial balance and counter to our natural critical instincts, we offer the following:

One department within state government deserving of praise, recognition and increased support is the DNR — the Department of Natural Resources. There was a time not many years ago, when the population of game animals in West Virginia was severely depleted and, in many instances, extinct in West Virginia. So successful have been DNR conservation policies that deer, once in short supply, are now found throughout the state in superabundance. Bear and wild boar are now hunted in several areas of the state and turkey promise shortly to thrive in the same abundance as deer. Hunters and their families can once again feast upon small game, game birds and water fowl of all sorts, and fish of marvelous variety and numbers now enjoy the waters of our streams and rivers.

One would think these accomplishments were enough to satisfy one hundred fold the demands for productivity ordinarily laid on public employees, but DNR feats do not stop here. Not everyone hunts or fishes, but we all enjoy and depend upon the purity of our ground water protected by DNR. And we can all enjoy walking or riding about looking at, listening to and even smelling the incredible variety of non-game wildlife and rare plant species nurtured and protected by the DNR.

Eighty seven percent of all vertebrates are considered non-game and are neither hunted, fished or trapped. Non-game animals in West Virginia include 261 species of birds, 51 mammals, 43 amphibians, 42 reptiles, 130 fishes and thousands of invertebrates. Peregrine falcons and bald eagles are once again nesting in West Virginia.

A Natural Heritage program conducted by DNR identifies unique natural areas within our state and plans includes a statewide natural areas program. These areas are to be protected in order to maintain diversity, educational opportunities, recreational activities and to increase tourist appeal.

For the work it does, DNR is shabbily underfunded and in recent years has suffered budget cuts rather than increases as a reward for its work. Surely, DNR merits better than this.

The *Journal* appreciates and applauds all those involved in the work of the West Virginia Department of Natural Resources. Like the ugly duckling of fable, DNR's true worth will someday be recognized.

—SDW

Advance directives 1991: Is the cart before the horse?

Editor's Note: *This editorial appeared in the January/February issue of the Journal of The American Board of Family Practice, 1440 Main St., Waltham, Mass., 02154. It is reprinted with permission and was written by Drs. Glenn Rodriguez and John Saultz of the Department of Family Medicine at the Oregon Health Sciences University School of Medicine in Portland.*

The United States Supreme Court decision in the case of Cruzan versus the Director of the Missouri Department of Health (1) has stimulated an intense national debate. Announced in June 1990, this decision affirmed the primacy of state law in right-to-die cases but left many issues unresolved. Intensified state and federal legislative activity has resulted in many new laws. The most important for all health professionals is the federal Patient Self-Determination Act of 1990 (part of the Omnibus Budget Reconciliation Act of 1990 (2). Scheduled to take effect on December 1, 1991, this act requires hospitals, nursing homes, and hospices to advise patients of their rights to accept or refuse medical care and to execute an advance directive. Compliance with this act is a condition for Medicare and Medicaid reimbursement.

Advocates for the Patient Self-Determination Act have a wide range of reasons for supporting this law. Clinicians foresee greater opportunities to understand their patients' values and provide better care. Ethicists believe such statutes can increase patient participation in medical decision making and increase patient autonomy. Third-party payers, especially the Health Care Financing Administration, hope

to decrease health care costs by eliminating unwanted care.

Ideally, advance directive discussions routinely should occur before times of crisis. Critics emphasize physician inaction in implementing advance directives as the reason legislative action was required. All acknowledge, however, that a purely procedural response to this act by hospitals will neither facilitate physician-patient communication nor promote patient autonomy.

Daly and Sobal (3) have contributed to our growing understanding of how advance directives are now used. In the physician house call program at the University of Maryland, family physicians with special interest in geriatrics demonstrated that systematic discussion of advance directives can increase the frequency with which patients prepare these documents. The results of the study (55 percent completed a durable power of attorney for health care and 5 percent had a living will) compare favorably with previously published data on the rate of advance directives in other populations (4). This probably reflects the values and preferences of the physicians who advised these patients. Nevertheless, information on the frequency of use does not yet answer the more important question: Do advance directives facilitate better patient care?

Shifting legal precedent and several recent studies indicate we have much to learn about how best to use these documents. In a provocative study, Danis and colleagues (5) showed that advance directives concerning treatment preferences were not followed 25 percent of the time. Unforeseen circumstances arose that caused health care providers or family proxy decision makers to reinterpret or overrule a previously documented advance directive. Seckler, et al (6), found poor agreement between the wishes of competent, chronically ill elderly patients and surrogate decision makers using a hypothetic cardiopulmonary resuscitation scenario. In their ruling in the Cruzan case, the Missouri Supreme Court rejected the concept of advance directives saying, "It is definitionally impossible for a person to make an informed decision — either to consent or to refuse — under hypothetical circumstance" (7). A recent report documents incomplete evaluation of competency prior to appointment of a durable power of attorney for health care as patients were admitted to a secured dementia ward (8). Limitations, both theoretical and practical, of advance directives as they are now used, are only beginning to be recognized.

How have we come to a crossroads where federal legislation is enacted to protect citizens from their physicians? Will physicians resent the Patient Self-Determination Act for this reason? How are other fundamental principles of medical ethics — beneficence, non-maleficence, and justice — factored into this new legal equation for medical decision making? Difficult decisions at the margins of life remain the most sensitive issues we face as physicians, individuals, and a society. There are no clearly correct answers. The ideal advance directive does not exist. As noted by Seckler et al, we need a new "standard which promotes trust between patients and their caregivers (both family and professional) and would return to a recognition that not all of life's events can or should be anticipated"(6). This new standard must recognize the limits of medical knowledge and human foresight. It must combine best-interest considerations, surrogate decision making, and written advance directives. Research into patterns of communication and decision making will bring clarity to the debate. Family physicians must begin to act now within the new requirements of the Patient Self-Determination Act to find techniques that are effective for them and their patients. This act is an important, though imperfect beginning. We must not allow it to become a "medical Miranda warning"(4), distorting our best traditions of helping and healing.

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AMA President to speak

WVSMA Annual Meeting set for August 19-22

AMA President John Lee Clowe, M.D., will address the Second Session of the House of Delegates at the WVSMA's 125th Annual Meeting, August 19-22 at The Greenbrier in White Sulphur Springs.

A family practitioner from Schenectady, N.Y., Dr. Clowe became president elect of the AMA in June 1991. He served as speaker of the AMA House of Delegates from June 1987 to June 1991 and as vice speaker from June 1984 to June 1987.

Dr. Clowe began his service to organized medicine in 1963 as a delegate to the Medical Society of the State of New York from Schenectady County. During his career, Dr. Clowe has also served as president of the Medical Society of the State of New York, as well as vice speaker, speaker of the house, and chairman of the House of Delegates for this society.

Dr. Clowe graduated from Union College with Sigma Psi honors and received his medical degree from Albany Medical College - Union University in Albany, N.Y. He completed his internship and residency at Ellis Hospital in Schenectady and served as a flight surgeon in the U.S. Air Force from 1946-49.

An attending physician in family practice at St. Clare's and Ellis Hospitals in Schenectady, Dr. Clowe is also an associate in medicine at the Albany Medical College in Albany. He is a diplomate of the American Academy of Family Physicians and is a past president of the American Academy of Family Physicians, Schenectady County.

Biographical information about the other speakers for the WVSMA Annual Meeting will be featured in upcoming issues of the *Journal*. The general sessions at this year's meeting will focus on the subjects of trauma surgery and the Health Care Planning Commission.

Dr. Clowe

For more information about the Annual Meeting, please contact Nancie Divvens at 925-0342.

Remember to make hotel reservations now for WVSMA Annual Meeting

This year's WVSMA Annual Meeting will be held during the same week as the West Virginia State Fair, so participants who wish to stay at The Greenbrier should call the hotel at 1-800-624-6070 as soon as possible for reservations.

For phone numbers and details about other area hotels, contact the WVSMA at 925-0342.

Health Care Congress

WVSMA Vice President Dr. James Comerci delivers his address for a panel discussion on "Access, Service Delivery Systems, Basic Services, Finance and Costs" at the 4th Annual Health Care Congress, which was held by the WVSMA and the West Virginia Hospital Association on January 16 in Charleston. Other panelists pictured are (left to right) Bob Whitler, vice president of public policy for the WVHA; Glenn Adrian, past president of the West Virginia Health Care Association; Steve Wade, associate director of the West Virginia Health Care Association; John Hurd, president of the West Virginia Chamber of Commerce; and Steve Shattls, president of Valley Health Systems.

Charleston site of WVAAFP Annual Meeting

The 40th Annual Scientific Assembly of the West Virginia Chapter of the American Academy of Family Physicians is set for April 10-12 at the Charleston House — Holiday Inn in Charleston.

This year's meeting will officially begin at 7 a.m. on Friday, April 10 with an informal breakfast for women in family medicine moderated by Marian Swinker, M.D. This event will be held concurrently with registration and a continental breakfast for the other participants. The morning's program will then continue with "Advances in Allergy," presented by Dr. Stanley Goldstein of Long Island Medical Hospital in Long Island, N.Y., and Dr. Peter Creticos of Johns Hopkins Asthma and Allergy Center in Baltimore.

Friday afternoon's program is devoted to "Infectious Disease in the Office Setting," moderated by Michael McDonald, M.D., of the WVU Family Practice Residency Program. Panelists include Richard Brown, M.D., of Baystate Medical Center in Springfield, Mass.; Heinz Eichenwald, M.D., of New York City; and Nelson M. Gantz, M.D., of Harvard University.

On Saturday, a variety of seminars in family medicine are scheduled, starting with "Panic Disorders," by Edmund Settle, M.D. The other sessions will be "Psycho/Social Aspects of HIV Infection," by Katie Bush, M.D., of Isaac Ray Center in Chicago; "Irritable Bowel Syndrome: A Rational Approach," by Melvin J. Steinhart, M.D., of Albany Medical College in Albany, N.Y.; "The Acute MI: Every Second Counts," by John M. Field, M.D., of Penn State University in Hershey, Pa.; and "Sexuality Issues in Mid and Later Life," by James Turnbull, M.D., of East Tennessee State University in Johnson City.

The final session, "Headache Management in Family Management in Family Practice," will be held Sunday morning. Featured speakers will be Seymour Solomon, M.D., of the Albert Einstein College of Medicine in Bronx, N.Y.; Elin Kropp, M.D., and Fred D. Sheftell, M.D., of the New England Center for Headache in Stanford, Conn.; and Ninan T. Matthew, M.D., of the Houston Headache Clinic in Houston.

Dr. Creticos

Dr. Bush

Dr. Turnbull

On Thursday prior to the start of the conference, two seminars will be held. The first will be devoted to the subject of computers and coding and billing, and the second will discuss obstetrical advances and issues. Other highlights of the meeting include an alumni party for graduates of the five family practice residency programs in the state, a golf tournament at Kanawha Country Club, as well as exhibits, business meetings and a variety of social functions.

The program has been reviewed and is acceptable for 18 prescribed hours by the American Academy of Family Physicians, and by the AMA for 18 hours toward the Physician's Recognition Award in Continuing Education. AOA credit towards category 2-A for 18 hours is also approved and individual certificate forms will be available at the registration desk.

For more details, contact the West Virginia Chapter of the American Academy of Family Physicians at 776-1176.

Hazardous materials seminars scheduled

The United States Environmental Protection Agency, the Agency for Toxic Substances and Disease Registry and other interested organizations are sponsoring a conference entitled "Hazardous Materials Incidents and the Medical Community" which will be held in Wheeling, Morgantown, Charleston and the Pittsburgh areas.

The goals of the meeting are to increase the awareness of medical professionals about the special problems and dangers inherent in treating chemically contaminated patients, to assess the local capability to deal with these patients, to identify training resources available to the medical community, and to expose potential gaps in training and make recommendations on how to fill those gaps.

The first meeting is scheduled for March 9 at Wheeling Hospital in Wheeling and the second will be held April 10 at the Ramada Inn in Morgantown. Plans are also being made for a meeting in Charleston on April 22, as well as for one in the Pittsburgh area at a later date.

For more information, contact Joe Albert or Bob Parkins at Roy F. Weston Inc. in Wheeling at 243-0800.

Doctors Day to be celebrated March 30

This year's national observance of Doctors Day will mark the 150th anniversary of Dr. Crawford W. Long's first use of ether anesthesia for surgery. Doctors of all specialties are honored on March 30 each year because of Dr. Long's efforts to painlessly remove a cyst from the neck of a patient.

In the 19th century, itinerant lecturers on chemistry toured the United States and their lectures included demonstrations, especially inhalation of nitrous oxide or "laughing gas." Often the audience got to participate in the "sniffing." This activity also moved into people's homes and schools, especially medical schools.

Between December 1841 and January 1842, a chemistry lecturer was in the Jefferson, Ga. area, and a group of friends asked local practitioner Dr. Crawford Long for nitrous oxide to inhale during a party. He had no nitrous oxide so he gave them sulfuric ether, which was used for relief of biliary of renal colic and bronchospasm. He knew ether would induce the desired state of altered consciousness and keep people from feeling pain because of his own experiences as a medical student at the University of Pennsylvania, where he had participated in ether parties.

Soon after providing ether to his friends, Dr. Long saw his patient, James M. Venable, who had two cysts on his neck and had delayed doing anything about them because he was fearful of pain. On March 30, 1842, Dr. Long gave Mr. Venable ether on a towel to breathe and when he was unconscious, Dr. Long excised one cyst. James Venable had no pain and he returned later for excision of the second cyst. Over the next two years, Dr. Long did six operations under ether.

His ability to take away the pain of surgery made him notorious in this rural county. The uneducated populace felt, no doubt, that the natural order of things included the inevitability of pain during surgery, and anyone who took that away was behaving unnaturally. Fear of losing patients probably kept Dr. Long from doing more operations.

He read about Dr. William Morton's successful demonstration

Crawford W. Long, M.D.

of surgical anesthesia using ether at Massachusetts General Hospital on October 16, 1846 in the December 1846 issue of the *Medical Examiner.* This had an extract of the *Boston Medical and Surgical Journal* article by J.H. Bigelow. The next month's issue of the *Medical Examiner* had several articles on ether which he also read. Finally in 1849, Dr. Long published his operations in the *Southern Medical Journal,* but there was little recognition for Dr. Long until the 1870s to 1890s.

Dr. Long's delay in telling the world about his work was due to several factors. He was an extremely busy practitioner and was a very reticent person, choosing not to squabble about who first discovered ether. His rural location would have made it difficult for him to receive the publicity given to the Boston event; Boston surgeon Dr. John Collins Warren was well-known and prestigious. Dr. Warren's approval of ether use was of great significance in getting acceptance. Also, Boston's situation as a busy port meant the news got to Europe rapidly and then spread throughout the world.

The Auxiliary of the Barrow County (Georgia) Medical Society led the effort to establish Doctors Day and The Southern Medical Association has celebrated Doctors Day since 1935. In 1958, Doctors Day became a nationally recognized observance by Congress.

Industry/CME Task Force continues deliberations

The Task Force on Industry/CME Provider Collaboration is a national group comprised of allopathic and osteopathic medical professionals, CME providers and industry, which has been meeting for more than two years to address the concerns that arise in connection with industry support of CME.

In recent months, the task force has met several times to discuss the issues raised in the "Draft Concept Paper," released for comment by the FDA in October 1991. These task force deliberations, which have included liaison staff from the FDA, are ongoing.

The task force provided a new and constructive forum for the building of important and appropriate partnerships and there has been general agreement on these points:

- Self-regulation as a crucial and intrinsic part of professional responsibility in CME;
- The central importance of the independence of CME content from commercial control;
- The need for a set of uniform standards for CME governing the relationship among industry, CME providers, faculty and learners;
- The need to continue dialogue with industry and the FDA to assure uninterrupted educational programming and funding; and
- The necessity for active, continuing attention to these issues by all stakeholders, over an extended period of time.

In 1990 and 1991, the task force organized, for the first time ever, two large national meetings on these issues. Both were sponsored by all of the major organizations in CME, and hosted by the AMA. The task force also initiated the review process that led to the revision and official adoption of new guidelines on Industry/CME relations by the Accreditation Council for Continuing Medical Education (ACCME).

The task force has begun the planning for its third annual national meeting which will be held October 8-9, in Chicago.

For further details about the task force or annual meeting, contact Dennis K. Wentz, M.D., at the AMA, (312) 464-5531.

Florida conference to explore politics, health care issues

"Health Care in the 90s: Values, Politics, and Rationing" is the title of a conference that will take place March 19 and 20 on the campus of the University of North Florida.

Sponsored by the Ethics Committee at University Medical Center and the University of Florida Health Sciences Center/Jacksonville, this seminar was designed for doctors, nurses, other health care providers, and individuals in the legal practice.

Participants will learn ways in which health care is "distributed," the values and political influences affecting the delivery of health care, and various health care delivery systems and their pros and cons. The most effective health care delivery system available in the 1990s will also be discussed.

Conference registration is limited to 125, so early registration is advisable; advance registration must be made no later than March 5. Registrants are eligible for CME credits and the course has been approved for continuing legal education credits.

For additional information, call Alicia Azouz at (904) 549-3158.

Sports medicine topic of OSU seminar

Helping physicians learn how to treat athletes is the focus of a two-day sports medicine program at the Ohio State University Sports Medicine Center in Columbus, April 24-25.

The Sports Medicine Symposium is co-sponsored by The Ohio State University Sports Medicine Center, the Center for Continuing Medical Education, and the Cleveland Clinic Foundation. Lectures will be offered by OSU and Cleveland Clinic Foundation faculty on how to decide whether an athlete should have reconstructive knee surgery, drugs in sports, stress fractures, and exercise-induced asthma.

For more information about the conference, contact Ohio State's Center for Continuing Medical Education at 1-800-492-4445 or (614) 292-4985.

Sixth annual critical care update set

The Sixth Annual Review and Update Course in Critical Care Medicine will be held April 22-26 at the Hyatt Regency - Capitol Hill in Washington, D.C.

The conference is co-sponsored by the Society of Critical Care Medicine, Rush Presbyterian - St. Luke's Medical Center, in cooperation with the Critical Care Medicine Department of the Clinical Center of the National Institutes of Health.

The curriculum for the course is developed to provide a comprehensive review and update on the diagnosis, monitoring, and management of the critically-ill patient.

The conference is accredited by the Foundation for Advanced Education in the Sciences/National Institutes of Health for a total of 35 credit hours in Category 1 of the AMA's Physician's Recognition Award. Reduced rates on hotel rooms and airfares are available.

For further information, contact Svetlana Lisanti at the Center for Bio-Medical Communication, Inc. (201) 385-8080.

WVU Central AHEC plans May conference

The Central AHEC Office of West Virginia University, Charleston Division, is sponsoring a conference entitled "Quality Assurance and Risk Management: Establishing Excellence in Primary Care," on May 14-15 at the Charleston Marriott.

The main speaker for the first day will be Dale Benson, M.D., F.A.C.P.E., who is director of Ambulatory Care Services for Methodist Hospital of Indiana, Inc. Dr. Benson is a consultant, surveyor and faculty member for the Joint Committee on Accreditation of Healthcare Organizations, and is co-author of the workbook "Quality Assurance in Ambulatory Care." Another featured speaker will be Bob Mitchell, A.C.S.W., who will lead a practical workshop on the relationship between documentation and reimbursement.

CME credits will be offered and for more information, contact the Central AHEC Office at 347-1243.

Otolaryngologists to hold annual meeting in May

The 10th National Annual Spring Meeting of the West Virginia Academy of Otolaryngology - Head and Neck Surgery, Inc., is scheduled for May 22-25 at The Greenbrier in White Sulphur Springs.

This meeting will feature 12 hours of CME credit for Category I of the AMA's Physician's Recognition Award.

For more information, contact F.T. Sporck, M.D., P.O. Box 1628, Charleston, WV 25326-1628 or 342-0124.

Urological Society to meet in Wheeling

This year's annual meeting of the West Virginia Urological Society will focus on "Complications of Urologic Surgery," and will be held March 27-29 at Ogelbay Park in Wheeling.

For information, contact Dr. Douglas E. McKinney in Bridgeport at 623-1001.

County Societies

McDowell

"Gastroesophageal Reflux Disease" was the title of January's program which was presented by Dr. Charles Bou-Abboud, a gastroenterologist from Beckley.

The members also voted to give a donation to a new organization in the community devoted to stamping out illiteracy.

Monongalia

The speaker for the January meeting was Sharon Brooks, who discussed RBRVS.

Dr. Pearson presented Drs. Carol Reid, Charles Whiteman, Larry Rhodes, Terry Pritt, Nick Ghaphery, Unyime Nseyo, Harry Bishop, Patricia Caballero, Hassan Ramadan, George Simmons Jr., James Holehouse and John Rollins for membership. In addition, Dr. J. Belard was presented for membership via second reading.

Continuing Education

Listed on this page are some of the upcoming CME programs which will be held in the state.

The programs this month were compiled by: Patricia Barnhart, WVSMA loss control coordinator; Robin Rector, coordinator of CME for Charleston Area Medical Center; and Thelma Wilson, education coordinator of the Raleigh County Medical Society.

Further details about these CME activities may be obtained by calling Barnhart at 925-0342; Rector at 348-9580; and Wilson at 253-6341. Other state and national meetings are listed in the Medical Meetings Section of the *Journal*.

If you would like to have the CME programs offered by your institution or association for physicians published in the *Journal*, please contact Nancy Hill, managing editor, at 925-0342.

West Virginia State Medical Association - Charleston

March 7 - "Marbury V. Madison Loss Control Program," Charleston.

CAMC/WVU Health Sciences Center - Charleston

March 7 - "Introductory Elements of Preparing a Grant Proposal," 8 a.m. - 4:30 p.m., 4th floor, WVU Health Sciences Center.

March 9 - "Care Coordination of the Pregnant Diabetic," teleconference

March 23 - "Diabetes and Hypertension," teleconference.

March 25 - "Diabetic Conference," 8 a.m. - 4 p.m., Auditorium, WVU Health Sciences Center

Raleigh County Medical Society - Beckley

Feb. 25 - "Clinical Application of Anti-Lipidemic Agents," Allan Marks, M.D., Black Knight Country Club, 6:30 p.m.

Mar. 5 - "Clinical Approach to Short Stature," Fereydoun Zangeneh, M.D. Black Knight Country Club, 6:30 p.m.

Mar. 17 - "Update on Estrogen Replacement Therapy," Black Knight Country Club, 6:30 p.m.

Mar. 23 - "The Role of Ace Inhibition in the Treatment of Hypertension," John H. Galla, M.D., Black Knight Country Club, 6:30 p.m.

Mar. 26 - "Update on Use of Therapy for Baldness," Black Knight Country Club, 6:30 p.m.

Outreach Programs

Key to Sponsors

★ *WVU Health Sciences Center, Morgantown*

☐ *CAMC/WVU Health Sciences Center, Charleston*

Man ☐ Man Appalachian Regional Hospital, Mar. 17, 7 p.m., "Pediatric Transport Team," Michael Waldeck, M.D., and team members

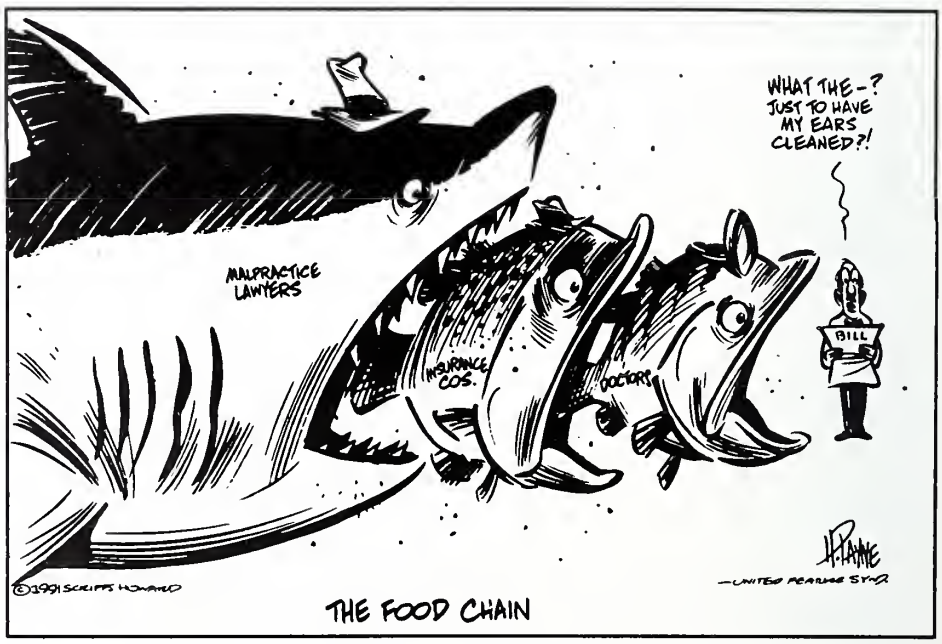
Montgomery ☐ Montgomery General Hospital, Mar. 4, 12:30 p.m., "Osteoporosis," Frederic Pollock, M.D.

Point Pleasant ☐ Pleasant Valley Hospital, Feb. 27, noon, TBA

Ripley ☐ Jackson General Hospital, Mar. 13, noon, "Steraotactic Procedures," Robert Clubb, M.D.

Spencer ☐ Roane General Hospital, Mar. 17, TBA

South Williamson ☐ South Williamson Memorial Hospital, Feb. 27, 5:30 p.m., TBA



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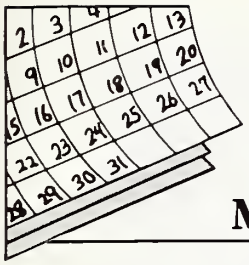


Medical Meetings

March

2-4—Primary Care for Today's Practitioner, Good Samaritan Medical Center, West Palm Beach, Fla.

2-5—The Alton D. Brashear Postgraduate Course in Head and Neck Anatomy, Medical College of Virginia, Richmond.

4-7—Eighth Annual Symposium on Computerization of Medical Records in conjunction with the North American Conference on Patient Cards, New Orleans.

5-7—Strong Children for a Strong America: National Choices, Community Strategies, Children's Defense Fund Annual National Conference, Atlanta.

6—Buy-in/Pay-out and New Physician Arrangements, The Health Care Group, Dallas.

6-7—35th Annual Postgraduate Ophthalmology Symposium: Diabetes Mellitus: Ophthalmic Perspectives, Ohio State University, Columbus.

6-7—Third Annual Ophthalmology Alumni Weekend, WVU Department of Ophthalmology, Morgantown.

6-11—American Academy of Allergy and Immunology, Orlando, Fla.

7—Dividing the Pie: Effective Income Division, The Health Care Group, Dallas.

8-11—American College of Mohs Micrographic Surgery and Cutaneous Oncology, Scottsdale, Ariz.

11-15—American Society of Dermatologic Surgery, Scottsdale, Ariz.

13-15—American College of Nuclear Medicine, New Orleans.

16-18—Sports Medicine: Spring Training, Good Samaritan Medical Center, West Palm Beach, Fla.

19-20—Health Care in the 90s: Values, Politics and Rationing, Ethics Committee at University of Florida Health Science Center, Jacksonville, Fla.

20—Managing Medical Practice Personnel, The Health Care Group, Pittsburgh.

22-26—American College of Surgeons, Orlando, Fla.

24—Practice Management Implications of the Medicare Fee Schedule, The Health Care Group, Charlotte, N.C.

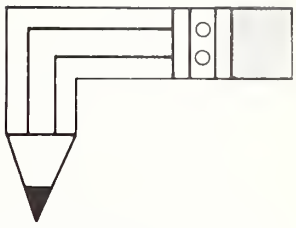
26-29—American College of Physicians, San Diego.

27-29—Complications of Urologic Surgery, Annual Meeting of the West Virginia Urological Society, Wheeling.

For More Information . . .

Contact the Journal for additional information about most of the above meetings. Call (304) 925-0342.

Poetry Corner



Christmas Angel

Death, the cunning battlelord
A formidable foe to us all
Though we defend ourselves against him
His sword's blow fells us all.

He struck during a celebration of life —
The blessed Christmas season
Devastating was his conquest
Her life ended for no earthly reason.

Though many lay wounded and bleeding
Death claimed only one that day
One simply needed compassion
To hear the soldiers for her sake pray.

The anguish of their harsh battles
Had shown them frailty is a quality of life
Death's dark blade spares no one
Neither child nor man nor wife.

Only once I'd met the martyr
Some had not met her at all
Yet even in her present silence
To all of us she does call.

I remember her earthly charisma
And witness the love her memory brings
She smiles down upon us
Donning a halo and angel's wings.

She implores us to fight the good fight
Death is conquered and we are winning
With a little faith and trust and love
Death is not the end, but the beginning.

So even though the righteous war
Causes bitter tears to fall
God has given us a Christmas angel
To watch over and protect us all.

Meggan Louden,
16-year-old daughter of
Dr. and Mrs. Barry Louden of Vienna,
and granddaughter of Dr. Jack J. Stark, also of Vienna

Please address your submissions for Poetry Corner to: Stephen D. Ward, M.D., Editor, West Virginia Medical Journal, Box 4106, Charleston, WV 25364.

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Indications and Usage: 1. *Active duodenal ulcer*—for up to 8 weeks of treatment at a dosage of 300 mg h.s. or 150 mg b.i.d. Most patients heal within 4 weeks.

2. *Maintenance therapy*—for healed duodenal ulcer patients at a dosage of 150 mg h.s. at bedtime. The consequences of therapy with Axid for longer than 1 year are not known.

3. *Gastroesophageal reflux disease (GERD)*—for up to 12 weeks of treatment of endoscopically diagnosed esophagitis, including erosive and ulcerative esophagitis, and associated heartburn at a dosage of 150 mg b.i.d.

Contraindication: Known hypersensitivity to the drug. Because cross sensitivity in this class of compounds has been observed, H_2-receptor antagonists, including Axid, should not be administered to patients with a history of hypersensitivity to other H_2-receptor antagonists.

Precautions: *General*—1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Dosage should be reduced in patients with moderate to severe renal insufficiency.

3. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

Laboratory Tests—False-positive tests for urobilinogen with Multistix® may occur during therapy.

Drug Interactions—No interactions have been observed with theophylline, chlordiazepoxide, forazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450 enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increased serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility—A 2-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a 2-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups.The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a 2-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in 1 fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in 1 fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Worldwide, controlled clinical trials included over 6,000 patients given nizatidine in studies of varying durations. Placebo-controlled trials in the United States and Canada included over 2,600 patients given nizatidine and over 1,700 given placebo. Among the adverse events in these placebo-controlled trials, only anemia (0.2% vs 0%) and urticaria (0.5% vs 0.1%) were significantly more common in the nizatidine group. Of the adverse events that occurred at a frequency of 1% or more, there was no statistically significant difference between Axid and placebo in the incidence of any of these events (see package insert for complete information).

A variety of less common events were also reported; it was not possible to determine whether these were caused by nizatidine.

Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to 3 times the upper limit of normal, however, did not significantly differ from that in placebo patients. All abnormalities were reversible after discontinuation of Axid. Since market introduction, hepatitis and jaundice have been reported. Rare cases of cholestatic or mixed hepatocellular and cholestatic injury with jaundice have been reported with reversal of the abnormalities after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in 2 individuals administered Axid and in 3 untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of anti-androgenic activity due to nizatidine. Impotence and decreased libido were reported with similar frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Anemia was reported significantly more frequently in nizatidine than in placebo-treated patients. Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H_2-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental—Urticaria was reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity—As with other H_2-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. The ability of hemodialysis to remove nizatidine from the body has not been conclusively demonstrated; however, due to its large volume of distribution, nizatidine is not expected to be efficiently removed from the body by this method.

PV 2093 AMP [101591]

Additional information available to the profession on request.

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Bureau of Public Health News

This page of material is submitted and paid for by the Bureau of Public Health.

DHHS acting secretary named

W. Donald Weston, M.D., has been named the acting secretary of the Department of Health and Human Resources. Governor Gaston Caperton announced his appointment January 10, after the resignation of Taunja Willis Miller, who returned to private law practice.

Dr. Weston came to West Virginia in October 1991 as the vice chancellor for Health Sciences. He will continue in that role, while providing oversight for the DHHS on an interim basis and assisting in the selection of a permanent secretary.

Waste rule filed

The Department of Health and Human Resources recently filed the Infectious Medical Waste Rule (64 CSR 56) with the secretary of state. The rule, effective March 1, covers the generation, handling, storage, transportation, treatment and disposal of infectious medical waste.

Under the emergency filing, all infectious medical waste management facilities, except small quantity generators, must apply for a permit with the Bureau of Public Health, Office of Environment Health Services (OEHS). Applications must be filed within 45 days of the effective date of the rule. An interim permit for up to 120 days may be issued to allow for the development of a waste management plan.

Small quantity generators are those generating 50 or less pounds of infectious medical waste during a one-month period. They are required to develop a waste management plan within 90 days of the effective date, but would only need to submit it to the OEHS upon request, or as part of an investigation into improper handling practices.

This rule was developed with health care providers from around the state, including representatives from the state hospital, medical and dental associations. A public hearing held October 3, resulted in a number of modifications to the rule. The goal of the OEHS has been to bring about proper and consistent waste management practices that protect the public and the environment from inappropriate disposal of infectious waste.

Complete details of the emergency rule are being sent to all health care providers. For more information, contact Joseph A. Wyatt of the OEHS Infectious Medical Waste Program at 348-2981.

Work on rural health plan underway

An 18-member advisory panel, chaired by Health Commissioner William T. Wallace Jr., M.D., M.P.H., has begun work on a plan to improve health care in rural areas by establishing new health training facilities. The panel, appointed by Governor Caperton, is made up of physicians, consumers, and representatives from hospitals, primary care centers, government and the state's three health science schools.

The Rural Health Initiative, also known as the Caperton Health Plan, was passed by the Legislature during the September special session. The plan calls for a total of $6 million to help the health science schools focus students' attention on the needs of rural areas and to set up a minimum of six rural health training sites. An additional three sites will be set up through funding from a grant by the Kellogg Foundation.

The application process began in late January for facilities wanting to become training sites and the deadline is early March.

Applicants must be non-profit community health centers or rural hospitals with under 100 beds, located in a medically underserved area of the state. Some 43 facilities expressed interest in response to an inquiry letter from the advisory panel.

The panel will recommend sites to Vice Chancellor for Health Sciences Donald Weston, M.D., who will then present his recommendations to the higher education Board of Trustees for final approval. Sites are expected to be chosen in late April or early May.

CDC claims diabetes deaths underreported

The Centers for Disease Control says underreporting of diabetes as a cause of death limits diabetes mortality reporting.

A November article in *Morbidity and Mortality Weekly Report* says to develop programs to control diabetes, health officials must know the disease burden.

In one study of diabetic patients, the frequency of death certificate mention of diabetes was 53 percent for whites, 50 percent for Hispanics and 33 percent for blacks. This is in direct contrast to the known prevalence of 4.6 percent for whites, 7.4 percent for Hispanics, and 8.8 percent for blacks.

The CDC reports West Virginia as having the nation's sixth highest diabetes prevalence rate. State statistics report a prevalance of 15 percent for individuals over 65, yet only 2.4 percent of 1990 state death certificates list diabetes as an underlying cause of death for this age group.

Physicians and other medical personnel are urged to record diabetes, if appropriate, on death certificates. For more information, contact Diabetes Control Program Director Helen Rentch at 348-0644.

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WEST VIRGINIA UNIVERSITY HEALTH SCIENCES CENTER

Compiled from material furnished by the West Virginia University Health Sciences Center News Service, Morgantown.

Chestnut Ridge opens new treatment center

Chestnut Ridge Hospital is opening a new mental health treatment facility in February that will allow individuals to receive intensive treatment and services throughout the day while continuing to live at home during the evenings and weekends.

Chestnut Ridge Day Hospital, a joint venture of Chestnut Ridge Hospital and the WVU School of Medicine's Department of Behavioral Medicine and Psychiatry, will be located on the WVU Health Sciences Center campus at 900 Chestnut Ridge Road.

Treatment modalities at the Day Hospital, which will service both adolescents and adults, will be similar to those at Chestnut Ridge Hospital and will include psychiatric evaluation, daily visits by a psychiatrist, and a full array of psychiatric support services and therapies.

Classroom instruction for adolescents will be provided by a certified teacher, and additional services, such as psychological testing and medical consultation, will be available through Chestnut Ridge Hospital.

D'Alessandri named to Accreditation Council for GME

Robert D'Alessandri, M.D., dean of the WVU School of Medicine, has been appointed to a two-year term on the Accreditation Council for Graduate Medical Education.

The council, a joint body composed of members of five national health care organizations, sets standards for the education of physicians in hospital residencies and other settings after completion of medical school.

Dr. D'Alessandri was appointed as a representative of the Association of American Medical Colleges. Other member groups in the accreditation council are the American Medical Association, American Hospital Association, American Board of Medical Specialties, and the Council of Medical Specialty Societies.

Resident wins SMA paper competition

Dr. Andrew N. Dentino, a third-year behavioral medicine and psychiatry resident, was the recipient of the Resident's First Place Award at the 85th Annual Scientific Assembly of the Southern Medical Association in Atlanta.

Dr. Dentino was presented the award for his scientific paper presentation "Steroid Psychosis in a Young Male Post-Renal Transplant."

While attending the conference, Dr. Dentino attended meetings of the Section of Neurology and Psychiatry. He also had two entries in the scientific poster program.

New consultation directory to be released soon

The 1992 edition of the WVU Health Sciences Center Consultation and Referral Directory is being prepared for distribution. The new edition includes listings for over 50 new faculty members and a summary of the HSC's regional services.

The directory is distributed to physicians, dentists and health care facilities throughout West Virginia and the surrounding regions.

New faculty named

These individuals recently joined the WVU School of Medicine faculty:

Morgantown Campus

Anesthesiology - Christine Bezouska, M.D.; Lynn Broadman, M.D.; Robert Johnstone, M.D.; Philip Monroe, Ph.D.; Robert Valenzuela, M.D.; and Robert Vance, M.D.

Behavioral Medicine/Psychiatry - James Cahill, M.D.; Jennifer Haut, Ph.D.; Terry G. Pritt, M.D.; and Marian Roberts-Ward, A.C.S.W.

Community Medicine - Floyd K. (Rusty) Russell, Ed.D.

Emergency Medicine - Daniel Scott Frame, M.D.; Debra Paulson, M.D.; and Lee Smith, M.D., J.D.

Family Medicine - Nick A. Ghaphery, D.O.; James D. Helsley, M.D.; and Jyoti Patel, M.D.

Medicine - Sam Congello, D.O.; Russell DeVore, M.D.; Paolo Romero, M.D.; Donald Seibert, M.D.; and Susan Weber, M.D.

Microbiology/Immunology - John B. Barnett, Ph.D.

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Obstetrics/Gynecology - Mark Gibson, M.D.; and G. Millard Simmons Jr., M.D.

Ophthalmology - John Linberg, M.D.; Charles Mayron, M.D.; Loan Nguyen, M.D.; Michael Osetinsky, M.D.; and Pamela Oliver, O.D.

Otolaryngology - Hassan Ramadan, M.D.; Carol Reid, M.D.; George Spirou, Ph.D.; and Mark Wax, M.D.

Pathology - Jacqueline P. Benziger, M.D.; and Brij M. Mitruka, M.D.

Pediatrics - Larry Rhodes, M.D.; and Patricia Osetinsky, M.D.

Pharmacology/Toxicology - William F. Wonderlin, Ph.D.

Surgery - Vicente Cortes, M.D.; Abdolkarim Sohrabi, M.D.; and Daniel Stewart, M.D.

Urology - Unyime Nseyo, M.D.

Charleston Division

Family Medicine - Daniel J. Dickman, M.D.; and James M. Mears, M.D.

Medicine - J. Gregory Rosencrance, M.D.; Thomas von Dohlen, M.D.; and Sarah Nease, M.D.

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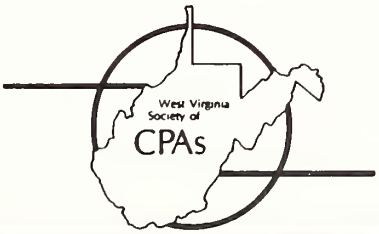

Marshall University School Of Medicine

Compiled from material furnished by the Office of University Relations, Marshall University

Pediatric medical van providing care in rural areas

Senator John D. Rockefeller IV cuts the ribbon for Southern West Virginia's new mobile pediatric clinic with the assistance of Dr. Irwin Redlener, head of the Children's Health Fund; Dr. Patricia Kelly, associate professor of pediatrics and medical director of Valley Health Systems; and Dana and Tali Arbel.

Some 3,500 rural children are expected to receive medical care this year through the new pediatric mobile medical unit, which is now operating under the aegis of Valley Health Systems in cooperation with the Marshall University School of Medicine.

The van was hailed as "a national statement" by Dr. Irwin Redlener, head of the Children's Health Fund, during dedication ceremonies December 3 in Wayne.

"We need lifelines from wherever care is available to the rural areas," said Dr. Redlener.

Through weekly stops, the van will serve children in Wayne, Lincoln, Mingo and Logan counties. Early destinations include Dunlow and Genoa in Wayne County and Frances Creek in Lincoln County. Each destination will have a regular team of physicians and support staff.

Dr. Patricia Kelly, associate professor of pediatrics and medical director of Valley Health Systems, is medical director of the project. The van will be staffed by Marshall and Valley Health physicians and Marshall residents. Special arrangements are being made to provide subspecialty pediatric care at Marshall to children who need it.

"Children presently underserved will now have the highest level of medical care available with this new mobile system," said Steve Shattls, Valley Health's executive director.

Senator John D. Rockefeller IV, noting that 100,000 West Virginia children lack health insurance, said he hopes such innovative programs ultimately will spread until no child lacks care because of cost or access problems.

The mobile pediatric unit and its early operating expenses were underwritten by Children's Health Fund, Senator Rockefeller, Lederle Laboratories and an anonymous donor.

Walden to serve as physician for Brazilian expedition

Dr. John Walden, associate dean for outreach and development, is part of an 18-member expedition retracing Theodore Roosevelt's 1914 exploration of Brazil's Rio Roosevelt.

Dr. Walden will provide medical services for the expedition, which will be only the third known navigation of the river. No one has traveled the length of the river since 1926.

Using Roosevelt's book, notes and photographs from his 1914 journey, the team will make historical comparisons and document environmental changes brought by development in one of the most remote regions of the world. These scientists will report their findings to the United Nations Conference on Environment and Development in Rio de Janeiro in June 1992.

Dr. Walden currently arranges overseas primary-care rotations in 20 countries for students from numerous universities in the United States and Canada. For the last 25 years, he has made annual trips to live and work with tribal populations in the tropical rain forests in Central and South America.

WV applications for medical school rise 22 percent

The number of West Virginians applying to the School of Medicine has risen 22 percent in the last year, compared to a national increase of approximately 14 percent.

Dr. Patrick Brown, associate dean for academic and student affairs, said it appears the quality of applicants at Marshall parallels the increase in numbers. "I'm impressed with the level of competitiveness of those interviewed and selected for the class so far," he said. "The applicants seem to be especially oriented toward primary-care specialties such as family practice and pediatrics."

Dr. Brown attributes the increase primarily to Governor Caperton's rural health initiatives, but added that increased awareness of innovative rural health programs at Marshall also seem to be a factor.

"Clearly Governor Caperton's efforts to spotlight rural health are paying off in a heightened awareness of the opportunities that exist in health care," Dr. Brown elaborated.

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Lynn M. Broadman, M.D.
Department of Internal Medicine
WVU Medical Center
Morgantown, WV 26506

Alfonso P. Cinco, M.D.
3757A Teays Valley Road
Hurricane, WV 25526

Samuel J. Congello, M.D.
Department of Cardiology
WVU Medical Center
Morgantown, WV 26506

G. Kristrin Crosby, M.D.
Department of Family Practice
WVU Medical Center
Morgantown, WV 26506

Russell F. Devore, M.D.
Department of Oncology
WVU Medical Center
Morgantown, WV 26506

John F. DiStefano, M.D.
311 Dry Hill Road
Beckley, WV 25801

Daniel S. Frame, M.D.
Department of Emergency Medicine
WVU Medical Center
Morgantown, WV 26506

James Gaal, D.O.
Rt. 1, Box 62B
Pinnell Street
Ripley, WV 25271

Gilbert Goliath, M.D.
Community Health Foundation
600E McDonald Avenue
Man, WV 25635

David Grossman, M.D.
J.D. Anderson Drive
Morgantown, WV 26505

E. Rhett Jabour, M.D.
1407 E. Main Street
Princeton, WV 24740

Robert E. Johnstone, M.D.
Department of Internal Medicine
WVU Medical Center
Morgantown, WV 26506

Denise Kirkland, M.D.
3719½ Rt. 75
Huntington, WV 25704

Charles D. Mayron, M.D.
Department of Internal Medicine
WVU Medical Center
Morgantown, WV 26506

Loan Kim Nguyen, M.D.
Department of Internal Medicine
WVU Medical Center
Morgantown, WV 26506

Michael G. Nunley, M.D.
1215 Quarrier Street
Charleston, WV 25301

Michael V. Osetinsky, M.D.
Department of Ophthalmology
WVU Medical Center
Morgantown, WV 26506

Thomas G. Pait, M.D.
Department of Neurosurgery
WVU Medical Center
Morgantown, WV 26506

Debra J. Paulson, M.D.
Department of Emergency Medicine
WVU Medical Center
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Oscar Stein, M.D.
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Mark K. Wax, M.D.
Department of Internal Medicine
WVU Medical Center
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Roberto C. Valenzula, M.D.
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Obituary

Harry E. Baldock, M.D.

Dr. Harry E. Baldock, 87, of Blaine, Minn., formerly of Charleston, died January 7, at home after a long illness.

Dr. Baldock was a Charleston pediatrician, who retired in 1978 after 44 years of service. He also worked for 10 years with the West Virginia Department of Health in the Division of Maternal and Child Health.

A 1930 graduate of West Virginia University, Dr. Baldock received his medical degree from the University of Louisville (Ky.) Medical School in 1932. He did his internship at Charleston General Hospital in 1933 and did two years of special residency training in pediatrics at City Hospital in Louisville.

A member of the American Academy of Pediatrics, Dr. Baldock was president of the medical staff at Charleston General Hospital in 1958, and was chief of pediatrics at the hospital from 1935 to 1964. He had been a member of the WVSMA since 1936, and was also a member of the AMA, the Kanawha Medical Society and the Southern Medical Association. Dr. Baldock was a World War II Army captain who served in Persia.

Survivors include his wife, Ann Stauner Baldock; daughter, Annie Ritter of Minneapolis, Minn.; brother, Donald Baldock of Charleston; and three grandchildren.

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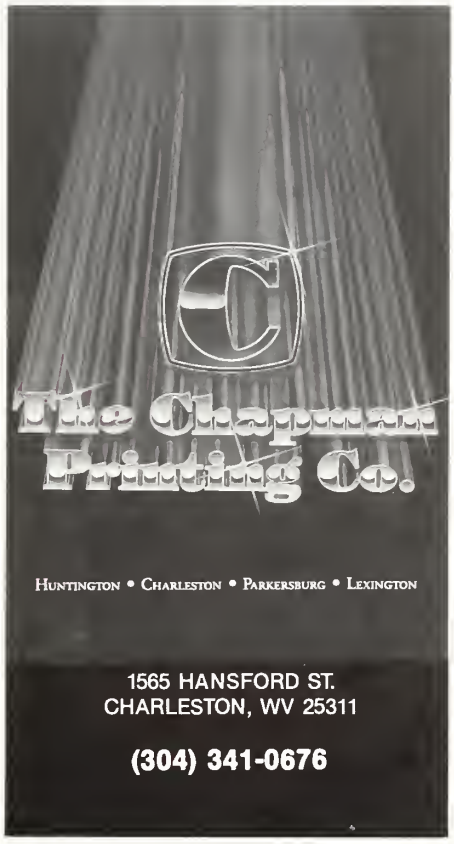

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Precautions: Verapamil should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdosage. Verapamil may decrease neuromuscular transmission in patients with Duchenne's muscular dystrophy and may prolong recovery from the neuromuscular blocking agent vecuronium. It may be necessary to decrease verapamil dosage in patients with attenuated neuromuscular transmission. Combined therapy with beta-adrenergic blockers and verapamil may result in additive negative effects on heart rate, atrioventricular conduction and/or cardiac contractility; there have been reports of excessive bradycardia and AV block, including complete heart block. The risks of such combined therapy may outweigh the benefits. The combination should be used only with caution and close monitoring. Decreased metoprolol and propranolol clearance may occur when either drug is administered concomitantly with verapamil. A variable effect has been seen with combined use of atenolol. Chronic verapamil treatment can increase serum digoxin levels by 50% to 75% during the first week of therapy, which can result in digitalis toxicity. In patients with hepatic cirrhosis, verapamil may reduce total body clearance and extrarenal clearance of digitoxin. The digoxin dose should be reduced when verapamil is given, and the patient carefully monitored. Verapamil will usually have an additive effect in patients receiving blood pressure-lowering agents. Disopyramide should not be given within 48 hours before or 24 hours after verapamil administration. Concomitant use of flecainide and verapamil may have additive effects on myocardial contractility, AV conduction, and repolarization. Combined verapamil and quinidine therapy in patients with hypertrophic cardiomyopathy should be avoided, since significant hypotension may result. Concomitant use of lithium and verapamil may result in a lowering of serum lithium levels or increased sensitivity to lithium. Patients receiving both drugs must be monitored carefully. Verapamil may increase carbamazepine concentrations during combined use. Rifampin may reduce verapamil bioavailability. Phenobarbital may increase verapamil clearance. Verapamil may increase serum levels of cyclosporin. Verapamil may inhibit the clearance and increase the plasma levels of theophylline. Concomitant use of inhalation anesthetics and calcium antagonists needs careful titration to avoid excessive cardiovascular depression. Verapamil may potentiate the activity of neuromuscular blocking agents (curare-like and depolarizing); dosage reduction may be required. There was no evidence of a carcinogenic potential of verapamil administered to rats for 2 years. A study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. Pregnancy Category C. There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. Verapamil is excreted in breast milk; therefore, nursing should be discontinued during verapamil use.

Adverse Reactions: Constipation (7.3%), dizziness (3.3%), nausea (2.7%), hypotension (2.5%), headache (2.2%), edema (1.9%), CHF, pulmonary edema (1.8%), fatigue (1.7%), dyspnea (1.4%), bradycardia: HR < 50/min (1.4%), AV block: total 1°,2°,3° (1.2%), 2° and 3° (0.8%), rash (1.2%), flushing (0.6%), elevated liver enzymes, reversible non-obstructive paralytic ileus. The following reactions, reported in 1.0% or less of patients, occurred under conditions where a causal relationship is uncertain: angina pectoris, atrioventricular dissociation, chest pain, claudication, myocardial infarction, palpitations, purpura (vasculitis), syncope, diarrhea, dry mouth, gastrointestinal distress, gingival hyperplasia, ecchymosis or bruising, cerebrovascular accident, confusion, equilibrium disorders, insomnia, muscle cramps, paresthesia, psychotic symptoms, shakiness, somnolence, arthralgia and rash, exanthema, hair loss, hyperkeratosis, macules, sweating, urticaria, Stevens-Johnson syndrome, erythema multiforme, blurred vision, gynecomastia, galactorrhea/hyperprolactinemia, increased urination, spotty menstruation, impotence.

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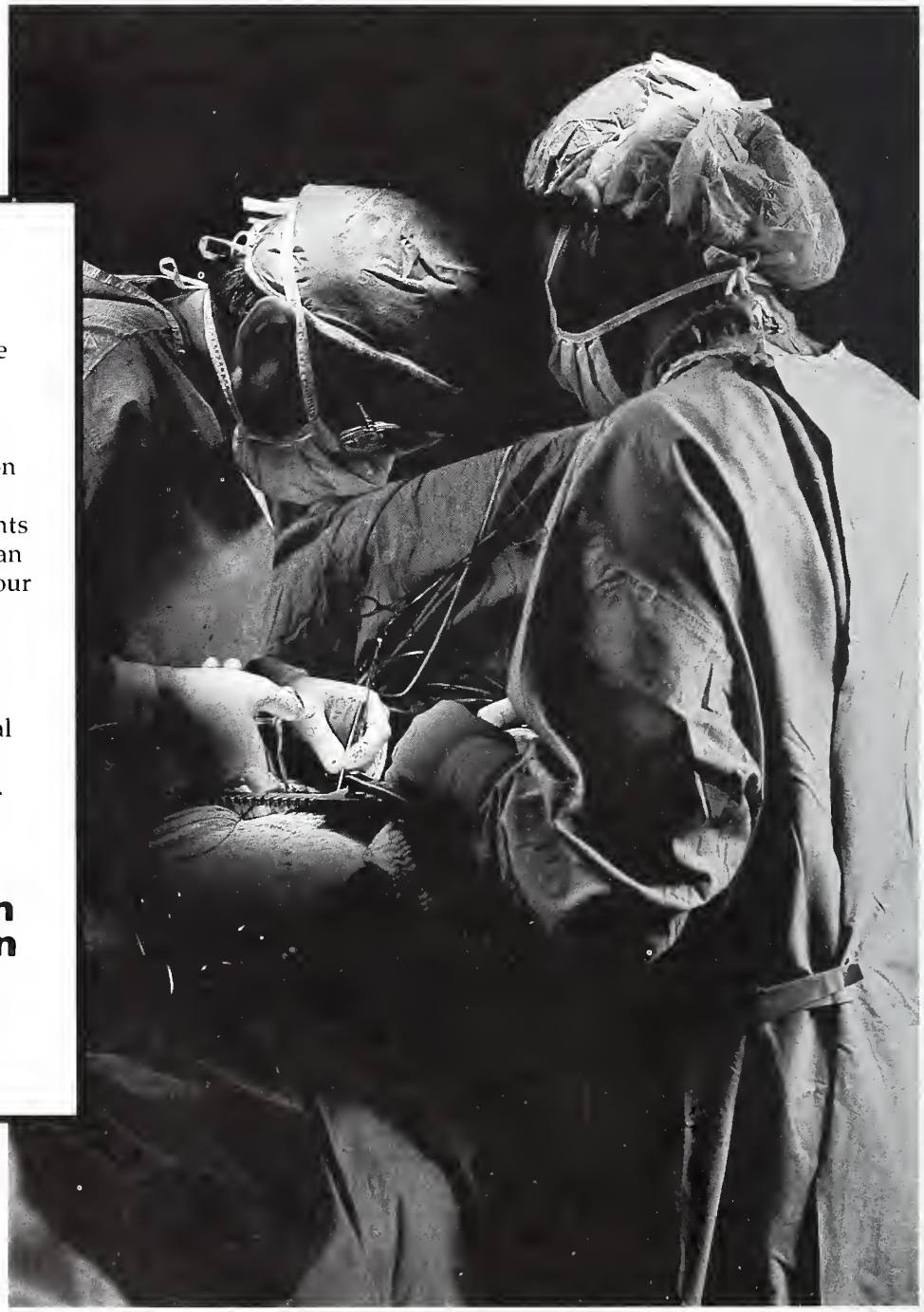

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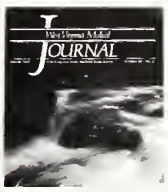

Front Cover

The waters of the Holly River flow swiftly through Holly River State Park in Webster County. Photo courtesy of *Stephen J. Shaluta Jr., West Virginia Division of Tourism and Parks.*

Special WESPAC Article

An Inside Look at AMA's 1991 Political Education Conference

EDWARD L. PINNEY JR., M.D.
Martinsburg, WV

Editor's Note: *Dr. Edward L. Pinney Jr., a psychiatrist in Martinsburg, recently attended the American Medical Association's 1991 Political Education Conference in Washington, D.C., with his wife, Fran.*

The influence that politics is having and will continue to have on the practice of medicine is undeniable, and my experiences at the AMA's 1991 Political Education Conference have given me valuable insight into the national legislative process and how physicians can become more effectively involved in it.

The meeting began with a breakfast where professional lobbyists spoke to the 300 of us participating about current medical legislative issues. They urged us to support the AMA's co-sponsorship of HR 3070, the bill to reduce the cut in Medicare payments from 16 percent to 6 percent. The lobbyists also mentioned that because of this bill, the AMA had made a coalition with the AARP, an organization it was usually at odds with.

The opening session that afternoon started with welcoming remarks from John J. Ring, M.D., who was president of the AMA at the time. The first speaker was Jack Germond, a syndicated columnist in Washington. Mr. Germond gave an overview of the political landscape and sketched out the politics involved in the current legislative approach to medical problems. Immediately following his talk, John S. Zapp, D.D.S., vice president of the AMA's Government Affairs Group, (who appeared to be a very active AMA lobbyist); W. Scott Wilbur, director of the AMA's Division of Congressional Affairs; and Dorothy J. Moss, director of the AMA's Division of Federal Affairs; gave their perspectives on the national legislative scene.

After these presentations, Fran and I were very pleased that Senator Jay Rockefeller addressed our group about revamping the health care system. He gave an outstanding speech and described health care as the number one issue of the 90s.

After Senator Rockefeller finished speaking, Kevin Moley, assistant director for the Management and Budget Department of Health and Human Services in the Bush administration, took the podium. He said "The Bush administration's health care proposal was like a roast in the oven that was not fully cooked." He continued by saying that "when the Bush administration thinks it is cooked, they will put it on the table."

Mr. Moley's remarks made almost everyone in attendance very angry because we couldn't believe that President Bush and his officials could be so flippant about health care when it is in such a crisis situation. Some of the physicians present challenged Mr. Moley with questions, but he gave very inadequate responses. By the end of his presentation, Mr Moley who supposedly is in line for a higher post under Secretary Louis Sullivan, was practically asked to leave the room.

Following this disheartening experience, we adjourned for an hour and before our next event, a Capitol Hill reception in the massive Cannon Caucus Room where the Watergate hearings were held. Representative Pete Stark of California attended this reception and spoke to the AMA's lobbying representative, John Zapp, and others. I met Senator Spector from Pennsylvania and a few congressmen, but unfortunately none from West Virginia. Several staff members from the offices of congressmen and senators also attended.

The atmosphere was informal with drinks flowing freely and enough food for those who were hungry. This reception seem to be effective in fostering collegial relationships between the doctors present and their representatives in Congress.

The next day at breakfast, Senator Conrad Burns from Montana was the featured speaker and he emphasized the public's right to choose a doctor and hospital, and a recent poll which showed people wanted the lowest cost possible for health care, but also wanted the best care without waiting.

Next on the agenda were four breakout sessions, *"Participating in the 1992 Elections," "Fundraising Techniques," "Presentation Skills and Image Building,"* and *"Grassroots Lobbying Techniques,"* which featured sessions for both small and large congressional delegations.

Fran and I chose to first attend the session on *Presentation Skills and Image Building,* which was conducted by Michael Sheehan from the PR firm Sheehan and Associates of Washington, D.C. Mr. Sheehan has coached and trained many presidential candidates and political figures, and he did an excellent program on outlining the fine points of making attention-grabbing speeches and presentations.

We then participated in the breakout session focusing on *Grassroots Lobbying Techniques for Small Congressional Delegations.* In this workshop, we learned grassroots lobbying is the most cost-effective.

We were told it is best to express our views to policy-making members in our own states, including local elected officials and community leaders. One of our presentors, Rich Johnson from the Wyoming County Medical Society, stressed the need for physicians to support legislation for access to care for the average voter. He also emphasized having state association membership surveys on issues like the economics of practice which inform everyone of the cost of having a medical practice.

Our luncheon speaker that day was Robert Michel, Republican leader of the House of Representatives, and we then heard from Bill McInturff of Public Opinions Stategies and Mark Mellman of Mellman and Lazarus about *"Health Care Issues in the 1992 Elections."* The final presentation of the conference was *"Party Presentations,"* a session featuring Ron Brown, chairman of the Democratic National Committee, and Clayton Yeutter, chairman of the Republic National Committee. The closing remarks for the meeting were made by Thomas Foley, speaker of the House of Representatives.

This meeting reaffirmed many of the aspects of politics Fran and I had learned from our relationship with the WVSMA, mainly the importance of grassroots lobbying, getting out the vote and being politically active. In addition, the conference reinforced the value of developing key contacts with state legislators and congressmen, and assisting with the campaigns of candidates you personally support.

In conclusion, I want to say politics isn't everything, but it turns out to be very important. The general public sees doctors as part of the problem. We need to behave in a way so we will be seen as a part of the solution.

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Special Report

West Virginia State Medical Association

25th Mid-Winter Clinical Conference

January 24 - 26, 1992

A special thank you is extended to the numerous participants in the WVSMA's 25th Mid-Winter Clinical Conference. Your commitment strengthens the Association and is vital to its success.

A special welcome to Huntington for the WVSMA's 25th Mid-Winter Clinical Conference was extended by Dr. Dennis Burton, president of the Cabell County Medical Society, at the luncheon honoring component society presidents, specialty society presidents and executive secretaries.

WEST VIRGINIA 1867 125 1992 STATE MEDICAL ASSOCIATION

25th Mid-Winter Clinical Conference

Dr. Rodney Kovach, an assistant professor at WVU, prepares to show slides for his presentation "MOHS Micrographic Surgery in the Treatment of Skin Cancer."

WVSMA President Dr. Constantino Amores was interviewed by Jack McCracken of WOWK-TV about the major issues facing health care in West Virginia.

WVSMA President-Elect Dr. Robert Pulliam stresses a point during his lecture on the pros and cons of Caesarian sections for the Second Scientific Session on "Controversies in Medicine."

Dr. John Holloway, moderator of the First Scientific Session on "A Healthier State," proudly unveiled the new T-shirt created by the Healthy West Virginia Coalition. With Dr. Holloway are panelists Sharon Lansdale, Alan Holmes and Lenore Zedosky.

WVSMA Councilor-at-Large Dr. Derrick Latos (left) addressed members of the West Virginia Chapter of the American College of Physicians about "Erythropoietin in Chronic Anemia," at their meeting, which was held prior to the WVSMA's Mid-Winter Clinical Conference. With Dr. Latos at the podium is Dr. Robert Marshall, governor of the WVACP.

Dr. Alice Faryna (center), medical director of Medicare Operations for Nationwide Mutual Insurance Company, gestures as she answers a question during the Physician Session on "The Realities of the RBRVS." With her are fellow panelists Chester Stroyny of HCFA (left) and Marc Segal, Ph.D., of the AMA.

World renown cardiothoracic surgeon Dr. William DeVries addressed participants at the Public Session about "Difficult Decisions in Medical Treatment/Ethical Choices."

Good friends Dr. Harold Selinger of CAMC (left) and Dr. Robert Touchon of Marshall University enjoy a hearty laugh during the question and answer segment of their presentations on "Thrombolitic TPA vs. Streptokinase."

Dr. Robert Marshall, governor of the West Virginia Chapter of the American College of Physicians, and his wife, Dr. Mabel Stevenson, listen intently to the questions during the Second Scientific Session. Dr. Stevenson was one of the featured speakers for the Fourth Scientific Session.

Joseph P. Schock (fourth from right), director of the Office of Environmental Health Services, gave an update about infectious medical waste to members of the WVSMA's Young Physician Section.

25th Mid-Winter Clinical Conference

Guests enjoyed partaking of the hors d'oeuvres at the reception sponsored by the alumni of West Virginia University and Marshall University.

Bruce Cox of Benchmark Data Systems explains a computer system to Dr. and Mrs. Kenneth Allen at his company's display in the lobby exhibit area.

WVSMA President Dr. Constantino Amores (second from right) and WVSMA Membership Coordinator Donna Webb discussed membership issues with Dr. Richard Capito of Charleston and Dr. Timothy Saxe of Huntington at the WVSMA's display, which was located on the mezzanine at the Radisson Hotel.

Dr. Janelle Duremdes and Dr. Rano Bofill were two of the many lucky door prize winners.

Dr. John Traubert (back right), chairman of the WVSMA Committee on Medical Education, emphasizes a statement during the committee's meeting at the WVSMA's Mid-Winter Clinical Conference.

WVSMA Junior Councilor Dr. Bill Atkinson (fifth from left) leads a discussion regarding progress in the area of surgery over the past 20 years at the WVSMA's Surgery Section meeting. Also during the meeting, Chairman Dr. Thomas Chang (right) presented a brief talk on "What's New in Thyroid, Breast and Colorectal Cancer," and provided information about the two nationally renown surgeons who will be speaking at the Surgery Section's breakfast at the WVSMA's Annual Meeting, which will be open to all registered physicians.

Julie Ayers of CNA Insurance Companies and Michele Sull of McDonough Caperton Insurance Group enjoyed being special assistants for entertainer Keith Matheny at the Super Bowl tailgate party, which was hosted by their companies.

Leave it to a neurosurgeon and WVSMA President Dr. Constantino Amores to come up with a great word like brain to try to fool mentalist Keith Matheny. Dr. Amores was not able to trick the blindfolded entertainer, who quickly guessed the word within minutes.

Medical students met with WVSMA President Dr. Constantino Amores (second from right), WVSMA Vice President Dr. James Comerci (left), and WVSMA Membership Coordinator Donna Webb to revitalize the WVSMA Medical Student Section.

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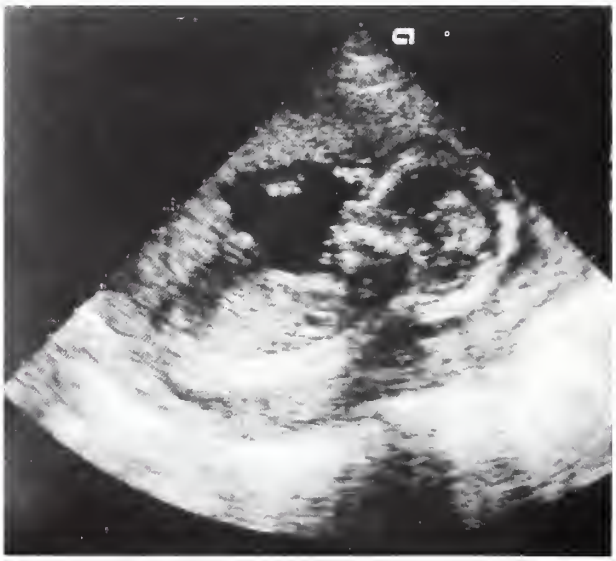

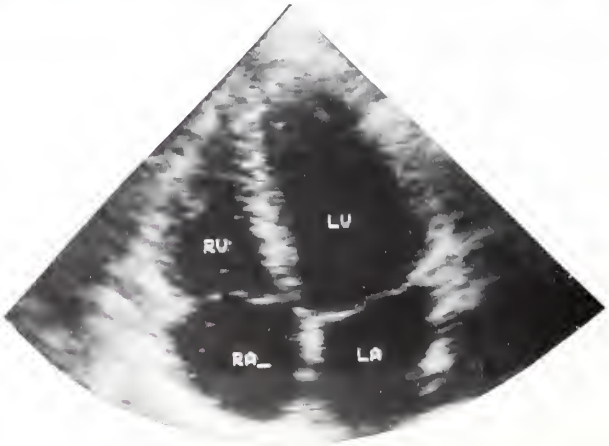

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Heparin-induced thrombocytopenia with thrombotic complications

ALI F. ABURAHMA, M.D.,
Professor of Surgery, Chief of Vascular Surgery and Medical Director of the Vascular Laboratory, Department of Surgery, West Virginia University Health Sciences Center/Charleston Area Medical Center, Charleston

FIRASAT S. MALIK, M.D.,
Cardiovascular Surgeon, Charleston Area Medical Center, Charleston

JAMES P. BOLAND, M.D.,
Professor and Chairman, Department of Surgery, West Virginia University Health Sciences Center/Charleston Area Medical Center, Charleston

Abstract

Heparin-induced thrombocytopenia with thrombotic complications is a serious clinical problem. The diagnosis is confirmed by a positive heparin-induced platelet aggregation test and/or detection of white clots upon pathological exam after a presumptive diagnosis based on these criteria:

(1) Development of thrombocytopenia of <100,000 mm³ while receiving heparin therapy;

(2) Normalization of the platelet count after an interruption in heparin therapy;

(3) The presence of thrombotic complications; and

(4) Exclusion of other causes of thrombocytopenia.

Eight patients with heparin-induced thrombocytopenia were encountered at the Charleston Area Medical Center, Memorial Division, in a recent 20-month period. Various types of heparin, routes of administration, and indications were implicated. The mean platelet nadir was 25,750 mm³ and the mean time to onset of of heparin-induced thrombocytopenia was 4.9 days. Thrombotic complications included seven patients with arterial occlusions of the legs, six with deep-vein thrombosis of the legs (three had pulmonary embolism), and five with combined arterial and venous thrombosis. Treatment strategies included discontinuation of heparin in all patients; intravenous infusion of dextran in five patients, followed by arterial thrombectomy in three patients; urokinase therapy in two patients for arterial thrombotic complications; and insertion of Greenfield filters in four patients for venous thrombotic complications. All surviving patients were given warfarin. The mortality rate was 25 percent and the morbidity rate was 38 percent.

In conclusion, an initial platelet count should be obtained on all patients prior to receiving heparin, followed by repeat platelet counts every two to three days. Once thrombocytopenia or thrombosis is diagnosed, heparin should be discontinued and other therapeutic modalities considered.

Introduction

Heparin-induced thrombocytopenia is the most serious clinical complication of heparin administration. It occurs in 0.1 percent to 30 percent (average 5 percent) of patients who receive heparin therapy (1). Mortality rates vary from 10 percent to 23 percent and morbidity rates vary from 20 percent to 60 percent.

Although the mechanism of heparin-induced thrombocytopenia is not entirely understood, its pathogenesis is believed to be immunologic. The onset of thrombocytopenia and its accompanying complications usually occur within four to 15 days in patients receiving heparin therapy for the first time, and in one to nine days in patients who have received heparin previously. When suspected, the diagnosis is confirmed by platelet aggregation tests and/or the presence of white clots upon pathological exam.

Patient population and methods

During a recent 20-month period, the charts of eight patients who were diagnosed as having heparin-induced thrombocytopenia with thrombotic complications were reviewed. The presumptive diagnosis was based on the following criteria:

(1) A low platelet count of <100,000 per mm³;

(2) Normalization of the platelet count after discontinuation of heparin therapy;

(3) The presence of thrombotic complications; and

(4) Exclusion of other causes of thrombocytopenia, e.g. sepsis, bone marrow suppression, or disseminated intravascular coagulopathy. The diagnosis was confirmed by a positive heparin-induced platelet aggregation test and/or detection of white clots upon pathological examination of surgical materials or at autopsy.

Patients' medical records were reviewed regarding age, sex, indications, dosage, and method of heparin administration. The initial platelet count was recorded. When thrombocytopenia was first observed, the date, platelet count, and the time between the onset of thrombocytopenia and the initiation of heparin therapy were recorded. The nadir of the observed platelet count was also recorded. The various thrombotic complications, diagnostic and therapeutic modalities were identified.

TABLE 1
Profile of Eight Patients with Thrombotic Complications

No.	Age	Sex	Indications for Heparin Rx	Heparin Dosage and Route	Platelet nadir/mm3	Time Lapse* (days)	Heparin Platelet Aggregation Test	Pathological Confirmation (Surgical specimen or autopsy)
1	64	F	Rt. iliac artery thrombosis	1800 u/hr intravenous	28,000	5	positive	yes
2	69	F	DVT** prophylaxis (hip replacement)	5,000 u subcutaneous every 12 hrs.	23,000	6	positive	yes
3	44	M	Coronary artery bypass graft	28,000 u intravenous bolus	13,000	6	positive	no
4	74	F	Myocardial infarction	1,000 u/hr intravenous	43,000	7	positive	no
5	52	F	DVT**, lt. leg	1,500 u/hr intravenous	27,000	4	not done	yes
6	47	F	DVT**, rt. leg and pulmonary embolism	2,000 u/hr intravenous	34,000	8	not done	yes
7	59	M	Coronary artery bypass graft	28,000 u intravenous bolus	21,000	1	not done	yes
8	55	M	Rt. femoral artery thrombosis	1,600 u/hr intravenous	17,000	2	not done	yes

*Time lapse between herapin administration and onset of thrombocytopenia.
**Deep-vein thrombosis.

Heparin platelet aggregation tests were done in the CAMC laboratory, as well as at the Blood Center of Southeastern Wisconsin in Milwaukee (2). These tests were performed by adding platelet-rich plasma from a controlled subject to the platelet-poor plasma from the patient believed to be affected. The sensitized platelet-poor plasma from the affected patient rendered the control platelet-rich plasma likewise sensitive. When heparin (1 unit/ml of plasma) and adenosine diphosphate solution were added to the platelet-rich plasma and the platelet poor-plasma mixture, the platelets aggregated.

Results

Patients' profiles, complications, therapeutic modalities, and outcomes are summarized in Tables 1 and 2. Patients with heparin-induced thrombocytopenia without any evidence of thrombotic complications were excluded from this review. Every route of heparin administration was implicated, including intravenous bolus, intraveneous continuous drip, and subcutaneous injection. Both porcine (seven patients) and bovine (one patient) heparin preparations were used. There were five women and three men, with an average age of 58 years. Indications for heparin administration were as follows:

(1) Thrombophlebitis of the lower extremity in two patients, one of whom had a pulmonary embolus;

(2) Coronary artery bypass graft in two patients;

(3) Iliofemoral arterial thrombosis in two patients;

(4) Heparin prophylaxis for deep-vein thrombosis in one patient who underwent hip replacement; and

(5) Acute myocardial infarction in one patient.

The time between the onset of thrombocytopenia and heparin therapy varied from one to eight days (an average of 4.9 days). Two patients (numbers seven and eight) had been given intraveneous heparin therapy two and three months previously. Both patients developed thrombocytopenia within 48 hours. The mean nadir of the platelet count was 25,750 per mm^3. Two patients had their diagnoses confirmed by a positive heparin platelet aggregation test and identification of white clots by pathological examination, two with heparin platelet aggregation tests alone, and four with pathological examinations alone. On microscopic examination, the white clots consisted of fibrin-platelet thrombi. All coagulation studies except the platelet count were normal.

TABLE 2
Thrombotic Complications, Therapeutic Modalities and Outcome

No.	Thrombotic Complications	Therapeutic Modalities*	Outcome
1	Pulmonary embolism, deep-vein thrombosis (lt. leg), lt. iliac artery thrombosis	Dextran, iliac artery thrombectomy, Greenfield filter and warfarin	Recovered
2	Pulmonary embolism, phlegmasia cerulea dolens, and popliteal artery thrombosis (lt. leg)	Dextran, popliteal artery thrombectomy, Greenfield filter and warfarin	Lt. transmetatarsal amputation
3	Deep-vein thrombosis (rt. leg) and lt. popliteal artery thrombosis	Dextran and warfarin	Lt. below-the-knee amputation
4	Deep-vein thrombosis (lt. iliofemoral) and right popliteal artery thrombosis	Urokinase, Greenfield filter and warfarin	Rt. below-the-knee amputation
5	Right femoral artery thrombosis	Urokinase, dextran and warfarin	Recovered
6	Phlegmasia cerulea dolens (rt. leg) and rt. femoral artery thrombosis	Dextran, femoral artery thrombectomy, Greenfield filter and warfarin	Recovered
7	Aortoiliac thrombosis	Patient arrested prior to any surgical intervention	Death
8	Rt. iliofemoral deep-vein thrombosis and pulmonary embolism	Pulmonary arrest prior to any investigation	Death

*These modalities are listed in consecutive order of treatment. Urokinase dose: loading dose of 2,000 units per pound followed by infusion of 2,000 units per pound per hour. Dextran-40 dose: 500 cc in D5W IV to run at rate of 25 cc/h. Warfarin dose: 10 mg/day until prothrombin time is approximately one and one half times the control value.

Thrombotic complications included seven patients with arterial occlusions of the legs, six with deep-vein thrombosis of the legs (three had pulmonary embolism), and five with combined arterial and venous thrombosis.

Treatment strategies included discontinuation of heparin in all patients followed by intravenous infusion of dextran in five patients (given within a few hours after discontinuation of heparin and continued until prothrombin time was regulated). Arterial thrombectomy was done in three patients and urokinase therapy was given to two patients for arterial thrombotic complications. Greenfield filters were inserted in four patients for venous thrombotic complications. All surviving patients were given warfarin.

The response of the platelet count to cessation of heparin therapy was usually prompt, often resulting in thrombocytosis of 400,000 to 600,000 platelets per mm^3 in several days.

Overall, three patients had a complete recovery without any sequela (37.5 percent), and two died (25 percent). Three others survived; two with a major below-the-knee amputation (25 percent), and one with a transmetatarsal amputation (12.5 percent). The overall mortality and major complication rate (below-the-knee amputation) was 50 percent.

A case presentation

A 66-year-old white male was admitted to Charleston Area Medical Center, Memorial Division, on January 30, 1990, to undergo coronary artery bypass graft for class III angina and three-vessel coronary artery disease, which had been confirmed by cardiac catheterization on January 18, 1990. The patient underwent the coronary artery bypass graft on February 1 and his postoperative course was complicated by deep-vein thrombosis of the right leg and pulmonary embolus.

After a week of heparinization, his left foot and lower leg became blue, dusky, and swollen with absent popliteal, dorsalis pedis, and posterior tibial pulses. The platelet count was 45,000 mm^3. A vascular consultation was obtained and non-invasive vascular testing was done which confirmed the presence of venous and arterial thrombosis of the left popliteal tibial arteries and veins. A presumptive diagnosis of heparin-induced thrombocytopenia with venous and arterial thrombotic complications was made and heparin was discontinued. At the time of the vascular evaluation, the left leg was somewhat non-viable and it was determined that the patient would not benefit from any further aggressive therapy, e.g. thrombolytic therapy, arterial, or venous thrombectomy (Figure 1).

On February 17, the patient's lower leg was amputated right below the

Figure 1. Gangrene of foot secondary to heparin-induced thrombocytopenia.

knee and a Greenfield filter was inserted for a pulmonary embolus. Postoperatively, the patient was started on warfarin and discharged on a maintenance dose. The diagnosis of white-clot syndrome was confirmed by the presence of white clots on pathological examination after his below-the-knee amputation.

As this patient's case demonstrates, heparin complication had a disastrous outcome.

Discussion

Two types of heparin-induced thrombocytopenia have been described (3). The first type occurs in one percent to 30 percent of patients receiving heparin and is a result of temporary platelet aggregation, margination, and peripheral sequestration (4,5). The degree of platelet count reduction is usually mild and transient, occurring after a few days of heparin therapy and it resolves despite the continued administration of heparin. The second type, with an incidence of 0.5 percent to 10 percent, is thought to be mediated by a heparin-dependent IgG antibody that induces thromboxane-B2 synthesis, a ^{14}C-serotonin release, and platelet aggregation (4,5,6). A rapid reduction in the platelet count generally occurs on the fourth to eighth day of heparin therapy which will not resolve with continued heparin therapy. These patients are predisposed to serious thromboembolic events.

Heparin-induced thrombosis was first described in 1958 by Weismann and Robin (7). Rhodes and colleagues (8) were able to identify a heparin-dependent IgG antibody as being responsible for the platelet aggregation. This paradoxical phenomenon of heparin-induced thrombosis is also known as the white-clot syndrome. The clot consists almost entirely of fibrin and platelet aggregates, with only rare red or white blood cells that give it the characteristic white color. The persistance of this IgG component in the patient's plasma appears to be valuable and has been found up to 12 months after the initial heparin sensitization (1). Upon re-exposure to heparin, the platelet count again falls quite rapidly, usually within the first few hours of heparin therapy. Thrombotic events can occur within the first few hours after re-exposure to heparin, such as in patient 7 in Table 1.

Attempts to identify risk factors for heparin-induced thrombocytopenia have been unsuccessful (1). No association between the incidence of thrombocytopenia and gender, blood type, drug allergies, or route and dose of heparin administration has been found. Although increased age and specific disease processes have not been shown to be risk factors, the syndrome occurs frequently in older patients and in patients who have undergone cardiovascular or thoracic surgery (9). This may be a result of the increased use of heparin in this patient population. Earlier studies reported a higher frequency associated with bovine heparin (4,10), but another study was unable to demonstrate a significant difference in occurrence of thrombocytopenia between the two heparin sources, bovine or porcine (5).

Heparin-induced thrombocytopenia should be suspected and tests should be done immediately on any individual found to have thrombocytopenia and increasing requirements of heparin to maintain adequate anticoagulation, or any new or recurrent thromboembolic event despite heparin therapy. The definitive diagnosis of heparin-induced intravascular thrombosis is obtained by performing platelet aggregation tests (2). Although this has been the traditional method of diagnosing heparin-induced thrombocytopenia and thrombosis, the sensitivity of these tests has subsequently been found to be low (11). Recently, platelet antibodies assay is preferable for this diagnosis. A test measuring the serotonin ^{14}C release instead of platelet aggregation is much more sensitive though, and highly specific, and may become the diagnostic test of choice in the future (12). Since patients with a platelet count of $<50{,}000$ per mm^3 were found to have an increase in platelet factor 3, an assay for platelet factor 3 is being developed to evaluate the relation between platelet factor 3 levels and the risk of complications in thrombocytopenia patients (13).

Coagulation tests distinguish heparin-induced platelet aggregation from other clotting disorders. The fibrinogen level and prothrombin time are usually normal. The fibrin split-product levels are normal or slightly elevated (1,2).

Complications requiring amputation, thrombectomy, or other surgery have occurred in up to 60

percent of the patients diagnosed with heparin-induced thrombosis (1). Mortality has been reported to be as high as 50 percent (3). Due to the high morbidity and mortality rates associated with heparin-induced thrombocytopenia, platelet counts should be monitored for all patients receiving heparin. An initial pre-heparin platelet count should be obtained, followed by repeat platelet counts every two to three days for the first 14 days of heparin therapy. The prothrombin time and partial thromboplastin time should also be monitored. Patients developing thrombocytopenia or resistance to heparin therapy should have heparin-induced platelet aggregation tests performed. If the platelet aggregation test is positive, heparin should be discontinued. A negative test does not exclude heparin as the cause of thrombocytopenia, since the test may become positive after heparin is discontinued. In patients suspected of heparin-induced thrombocytopenia with a negative platelet aggregation test, heparin should be discontinued once other potential causes of theombocytopenia have been ruled out. An increase in the platelet count following cessation of heparin confirms the diagnosis. The platelet count rises significantly after discontinuation of heparin therapy. The platelet rebound is usually prompt, often resulting in thrombocytosis of 500,000 to 600,000 platelets per mm^3 in several days.

Some clinicians advocate the use of protamine to reverse the affects of heparin since protamine effectively prevents the antibody-mediated platelet aggregation produced by heparin (2). The use of anti-aggregating agents (e.g. dextran-40) will result in a substantial increase in the platelet count, and they are necessary in the treatment of heparin-induced thrombocytopenia. Early identification of this complication is necessary to avoid the catastrophic complications of major limb amputation or death. Sobel and colleagues (13) suggested that in addition to providing an anti-thrombotic effect, the use of dextran-40 might promote more rapid normalization of the platelet count and prevent the development of thrombotic complications by interrupting heparin-dependent intravascular platelet aggregation. If continued anticoagulation is necessary, warfarin may be used (1). To impair platelet adherence and aggregation, Laster and his co-authors (14) recommended the use of acetylsalicylic acid and dipyridamole. King and Kelton (15) suggested that by starting oral anticoagulants concomitantly with heparin therapy, many cases of heparin-induced thrombosis could be prevented. By initiating both warfarin and heparin therapy simultaneously, heparin can be discontinued when the oral anticoagulant has fully taken effect and before the thromboembolic complications of heparin therapy are manifested.

Streptokinase and urokinase have achieved good results in some patients with thrombosis (16). This may be the treatment of choice when ischemia is critical and embolectomy is contraindicated. Vendor and colleagues (17) successfully used plasmapheresis with high dose immunoglobulins in the treatment of heparin-induced thrombocytopenia in a patient requiring urgent cardiac surgery. Plasmapheresis removes abnormal IgG antibodies and a series of five large volume plasmapheresis can remove 90 percent of the antibodies initially present (1).

Recently, iloprost, a new prostacycline (PG-12) analog, has been used to treat patients with heparin-induced thrombocytopenia (18). Iloprost inhibits platelet aggregation immediately and has a half-life of 15 minutes - 30 minutes. The use of iloprost may be more advantageous than acetylsalicyclic acid with dipyridamole or warfarin therapy when rapid reversal of anticoagulation is necessary.

Low molecular weight heparin is widely used in Europe for the treatment and prevention of heparin-induced thrombocytopenia (19,20). The low molecular weight fraction of heparin potentiates activation of factor Xa and XIIa, but demonstrates less reactivity to thrombin. These compounds produce less inhibition of platelet function and may produce less bleeding. Low molecular weight heparin appears to greatly lessen the potential for inducing thrombocytopenia and thrombosis.

Makhoul and his co-authors (21) reported that ORG 10172, a heparinoid, did not cause platelet aggregation. Treating patients with heparin-induced thrombocytopenia with heparinoid would obviously be potentially valuable, and the efficacy of this drug as an anticoagulant appears promising.

When testing reveals heparin-mediated platelet aggregation, continued heparin exposure can result in severe thrombotic complications. Venous thromboembolism can be effectively treated with warfarin anticoagulation. Pulmonary embolism can be prevented by placement of a Greenfield filter if a significant interval without adequate anticoagulation is anticipated and there is a major risk of embolism. When the patient requires arterial procedures, the approach should be individualized, in part on the basis of the urgency of their condition.

In conclusion, early recognition of this syndrome cannot be over-emphasized since a missed or late diagnosis can have great consequences. Awareness of the syndrome and close monitoring of the platelet count during heparin therapy are critically important. Frequent monitoring of the platelet count is recommended for all patients receiving heparin therapy. Every diagnosis is strongly suspected, especially on the basis of the heparin-induced platelet aggregation test. Heparin should be discontinued and an alternate method of anti-thrombotic therapy should be considered, such as warfarin, acetylsalicylic acid, dipyridamole, dextran, streptokinase, urokinase, low molecular weight heparin, or iloprost.

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Effects of the lithotomy position on arterial blood flow in the lower extremities

TIMOTHY D.W. CANTERBURY, M.D.*
Associate Professor, Marshall University School of Medicine, Huntington
WILLIAM E. WHEELER, M.D., F.A.C.S.*
Staff Surgeon, Upstate Carolina Medical Center, Gastonia, S.C.
CAROL E.H. SCOTT-CONNER, M.D., F.A.C.S.*
Professor of Surgery, University of Mississippi, Jackson, Miss.

Abstract

The lithotomy position is known to decrease venous blood flow and predispose to lower extremity venous thrombosis. However, arterial thrombosis secondary to surgical positioning has rarely been discussed. One hundred patients underwent measurements of their ankle-arm index, the ratio of their ankle systolic pressure compared to their brachial blood pressure, preoperatively (AAI); immediately after being placed in the lithotomy position (AAII); and immediately prior to returning to the supine position (AAIII). Comparison of all the ankle-arm indexes revealed significant drops between preoperatively and immediately after being placed in the lithotomy position, and between preoperatively (p<.01) and immediately prior to the supine position (p<.05). When only preoperative ankle-arm indexes of 0.99 were examined, a very significant drop of p<.005 was obtained. No significant drop was seen in the group with preoperative ankle-arm indexes less than 0.99. In view of this pressure drop, standard lithotomy stirrups, such as those usually utilized for OB procedures, should be used with caution for procedures requiring prolonged lithotomy position.

**Dr. Canterbury was formerly the chief surgical resident at the Marshall University School of Medicine in Huntington, where Dr. Wheeler was previously an assistant professor of surgery, and Dr. Scott-Conner was an associate professor of surgery..*

Introduction

The combined-lithotomy Trendelenberg position is commonly used to facilitate low pelvic dissection for rectal surgery. The synchronous-combined approach to abdominoperineal resection, the performance of low-stapled anastmoses, and various pull-through procedures are all possible with this position. Although special stirrups which have just a 30 degree - 45 degree angle instead of an 85 degree - 90 degree angle have been devised for these prolonged operative procedures, some surgeons lack access to these specialized devices (1).

Lithotomy stirrups are sometimes used when more specialized positioning aids are not available. The occurrence of acute arterial thrombosis of the lower extremity in two elderly patients following prolonged colorectal surgery in the lithotomy position (with stirrups) prompted this comparitive study of their arterial blood flow.

Case report

A 76-year-old white male underwent low anterior resection for a carcinoma of the rectum. During the procedure, he was placed in the lithotomy position for approximately 40 minutes. In the recovery room, he was noted to have absent pulses and a blue left leg. He was taken back to surgery and underwent a thrombectomy. Post-thrombectomy arteriogram revealed no evidence of any peripheral vascular disease. He had no predisposing factors for clotting or emboli.

Methods

One hundred patients undergoing elective cystoscopy or other urologic procedures requiring the lithotomy position at the Veterans Affairs Medical Center in Huntington were studied. The ankle-arm index was measured for each leg as the ratio of the ankle systolic pressure over the brachial systolic pressure at three selected times: preoperatively (AAI), immediately after positioning the patient in the lithotomy position (AAII), and at the conclusion of the operative procedure (AAIII). All procedures were performed under spinal anesthesia. A total of 199 lower extremities were studied and one patient had undergone a previous below-the-knee amputation.

Results were expressed as a mean ± standard deviation and compared using Student's t test. Statistical significance was defined at the $p<.05$ level. Analyses were performed using a commercially available statistics package (Abstat 4.08) on an IBM PC microcomputer.

Results

The ankle-arm index dropped when patients were initially placed in the lithotomy position (AAI = 1.04 ± 0.08, AAII = 1.01 ± 0.17, $p<.01$) and remained low at the end of the operative procedure (AAIII = 1.02 ± 0.18, $p<.05$).

There were 144 lower extremities with preoperative ankle-arm indexes ≥ 1.00. When these were considered separately, a larger drop was observed (AAI = 1.12 ± 0.13, AAII = 1.07 ± 0.13, $p>.005$; AAIII = 1.07 ± 0.16, $p<.005$).

The remaining 55 legs had ankle-arm indexes < 1.00. No significant changes were noted with the assumption of the lithotomy position in these extremities (AAI = 0.86 ± 0.15, AAII = 0.87 ± 0.18, P=N; AAIII = 0.90 ± 0.16, P=N.S.).

In 24 lower extremities, the ankle-arm index fell more than 0.2 points from preoperative to intermediate values. In nine lower extremities, a drop of more than 0.3 points was noted. The occurrence of these large drops in ankle-arm indexes did not correlate with the preoperative ankle-arm indexes.

Discussion

Complications resulting from intraoperative positioning have been known and previously reported (2,3). It has been recognized that procedures done in the lithotomy position can lead to serious complications. Deep venous thrombosis is well known and there are reports of compartment syndromes and nerve injuries resulting from procedures done in the lithotomy position (4,5). There are isolated reports of arterial complications such as thrombosis of lower extremity aneurysms (6). A review of the literature revealed no reports of lower extremity non-aneurysmal arterial thrombosis.

Positioning the legs in traditional lithotomy stirrups causes sharp flexion at the hips and knees which may result in angulation of the femoral and popliteal vessels. This may cause a decrease in blood flow. Since many of the colorectal procedures are performed on elderly patients with atherosclerosis, the resulting angulation may lead to acute arterial thrombosis (7).

In our study, a significant drop in the ankle-arm index was observed immediately after placing the lower extremities in the lithotomy position. This fall was maintained throughout the period of surgery. Since most urologic procedures were of brief duration, we did not have an opportunity to study the effect of prolonged lithotomy position on ankle-arm index. However, the fall in arterial flow which we observed during these short procedures may indicate that significant angulation of vessels with increased stasis is occurring.

The group of patients with abnormally high ankle-arm indexes are primarily patients with calcified lower extremity vessels, in whom ankle pressure may be falsely elevated. An even larger drop in ankle-arm index was noted when these patients were placed in the lithotomy position.

A small subset of patients had pronounced drops in ankle-arm index (difference >0.3). This subset could not be predicted on the basis of preoperative ankle-arm index. These patients may be at an increased risk of arterial complications.

The lithotomy position causes a significant pressure drop in blood flow to the distal lower extremity. In view of this pressure drop and the potential for development of rare but serious vascular complications, standard lithotomy stirrups should not be used for procedures requiring prolonged lithotomy position. For these procedures, low-dose heparinization or alternative methods of positioning the patient, such as Lloyd-Davis stirrups or other kinds of leg supports which are designed to support the legs in an abducted and minimally flexed position, should be considered.

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Lyme disease case studies

DAVID A. PAULK, PA-C, Booth, WV*

Abstract

Lyme disease is the commonest tick-borne disease in the United States (1). Since the Mill Creek Clinic opened in March 1991, we have diagnosed two cases of the total five cases of Lyme disease reported in West Virginia.

Case 1

A 28-year-old woman had a fever of 104 degrees Fahrenheit one week before her visit to the Mill Creek Clinic. It resolved spontaneously, but headache and arthralgia followed. After three days, she developed a maculo-papular rash over the abdomen and the front of the arms and legs. The head, neck and throat were clear. There was no history of prior infectious diseases, drug use or abuse, sore throat, or rheumatoid arthritis. She was allergic to Codeine and Tetracycline. There was no adenopathy.

Examination of the heart, lungs and abdomen was negative (except for the rash). There was no joint tenderness, cyanosis, edema, or clubbing, and the range of joint motion was full. The nervous system was intact.

The blood count included 4,800 leukocytes/c.mm. and a hematocrit of 33 percent. The lactic dehydrogenase was mildly elevated at 225 IU (109-193), but all the other liver function tests were normal. Tests for rheumatoid factor, anti-nuclear antigen and streptococci (throat) were negative. The Lyme disease antibody test gave an index of 1.16 0.95 negative; 0.95-1.05 equivocal; >1.05 positive).

She was started on Erythromycin 1.0 g. daily by mouth, while the tests were on order. This was continued for 30 days. She gradually improved, and the Lyme antibody titer was 0.34 at the end of treatment, and she has not had a relapse.

Case 2

A 38-year-old woman was bitten by a small tick. She complained of a red swelling and of a wide-spread rash (without itching) and joint pains. She had been in the woods near her home, where there is a dense population of white-tailed deer, on the day of the incident. Her previous history was equally negative.

There was a raised, reddened area over the left scapula, like a target, measuring 2 cm. x 2 cm. with a possible central puncture wound. A fine rash was noted over the chest, abdomen, and flexor surfaces of both arms. The physical examination was otherwise negative.

A Lyme antibody titer was ordered. The EIA index was <0.800 (<0.625 negative, 0.625-1.000 equivocal, >1.000 positive). No other tests were obtained since she could not afford them. She was treated with Doxycline 100 mg. BID for 30 days. She gradually improved. At her final visit, she was free from rash and "99 percent pain free." The Lyme antibody titer was <0.625. There has been no relapse.

Discussion

Since 50 percent of patients may be antibody negative (2) in the early course of the disease, clinical recognition is important.

The first sign is usually a local infection, such as erythema migrans. Weeks after the initial infection, spread of the spirochaete to blood or lymph results in more diffuse complaints, such as headaches, stiff neck, and migratory pains in muscles, joints and tendons. Persistent fatigue and malaise are common. Cardiac manifestations in 4 percent - 10 percent of patients include variable atrio-ventricular block and left ventricular dysfunction (2,3). Neurological findings occur in 10 percent - 30 percent of patients (2,4), and include headaches, meningismus, meningitis, radiculoneuritis, and facial palsy. These symptoms usually resolve slowly, whether treated or untreated (5). The late stage may present as persistent infection months or years later with joint pains, arthritis (especially affecting the large joints), and chronic synovitis, leading to permanent disability.

One of our patients had a diagnostically elevated antibody titer; the other patient's titer was equivocal. Both had rash (one with a localized infection) and both responded well to treatment.

Practitioners must have a high index of suspicion if they are to recognize Lyme disease in its early states. Early treatment is rewarding for both patient and practitioner.

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*Mr. Paulk was formerly the physician assistant at Valley Health Care, Inc. in Mill Creek, W.Va., where he helped diagnose these two cases of Lyme disease under the supervision of the clinic's Medical Director Dr. Joseph Noronha.

Manuscript Information

Manuscripts to be presented for publication in the *West Virginia Medical Journal* should be prepared in accordance with "Uniform Requirements for Manuscripts Submitted to Biomedical Journals" (1) (International Committee of Medical Journal Editors).

The *West Virginia Medical Journal* will not consider for publication a paper or work that already has been reported in a published paper, or is described in a paper submitted or accepted for publication elsewhere.

Manuscripts, accompanied by one copy, should be typewritten, double-spaced, on one side only of white bond paper (8½ by 11 in.), with margins of at least one inch.

Use double spacing throughout, including (in the following order) title page, abstract, text, acknowledgements, references, tables, and legends for illustrations. Begin each of the following sections on separate pages: title page, abstract, text, acknowledgements, references, individual tables, and legends for illustrations. Number pages consecutively, beginning with the title page. Type the page number in the upper right-hand corner of each page.

Articles contained on computer diskettes are acceptable and encouraged. Please contact the *Journal* in advance to determine the format type to be used. The conventional manuscript as described above must accompany the diskette.

All persons designated as authors should qualify for authorship. Each author should have participated sufficiently in the work to take public responsibility for the concept.

The second page should carry an abstract of no more than 150 words summarizing the manuscript.

Where reference is made to generically-designated drugs, the first such reference must be followed by parentheses containing the most commonly known trade-name drug of that designation. In addition, a listing of all generic drugs mentioned in the article, with their trade-name equivalents, should appear at the end of the article.

Tables (tabular listings) and figures (photos, drawings and charts) should be numbered and the point of reference in the text indicated in parentheses, i.e., (Table 1), (Figure 1).

Photos must be good-quality unmounted glossy prints usually 5 by 7 in. but no larger than 8 by 10 in. Black and white photos are preferred. Color photos will be printed in black and white. Cost of printing photos in excess of four will be billed to the author.

Each photo (figure) should have a label pasted on its back indicating the name, its number and an indication of its "top." A separate legend should be provided for each photo. Do not write on the back of photos, or scratch or mar them using paper clips. Do not mount them on cardboard. Drawings and charts should be done in solid black on pure white.

Number references consecutively in the order in which they are first mentioned in the text. Identify references in text, tables, and legends by arabic numerals (in parentheses).

No more than 25 references will be published free of charge to the author.

Use the style of references seen in this *Journal*, which is based on the formats used by the U. S. National Library of Medicine in *Index Medicus*. The titles of journals should be abbreviated according to the style used in *Index Medicus*. Consult "List of the Journals Indexed," printed annually in the January issue of *Index Medicus*.

All scientific material appearing in the *Journal* is reviewed by the Publication Committee. Manuscripts should be mailed to The Editor, West Virginia Medical Journal, Box 4106, Charleston, WV 25364.

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West Virginia Chapter
AMERICAN COLLEGE OF SURGEONS
Annual Spring Meeting
April 29 - May 2, 1992
The Greenbrier — White Sulphur Springs, WV
10 Hours CME

GUEST SPEAKERS: William C. Wood, M.D., F.A.C.S.
Professor & Chairman, Surgery
Emory University
"Breast Cancer: How Much Has Changed, Yet How Little"
"The Changing Management of Colorectal Cancer"

Talmadge A. Bowden, Jr., M.D., F.A.C.S.
Professor of Surgery
Medical College of Georgia
"Management of Gastrointestinal Bleeding"
"Complex Enterocutaneous Fistulas"

Other Statewide Speakers, Including the Annual Residents' Competition — Saturday
Tennis Tournament — Thursday, Golf Tournament — Friday
Registration: WV Chapter American College of Surgeons
P. O. Box 1107
Morgantown, WV 26505
Rooms: The Greenbrier — (304) 536-1110

President's Page

Constantino Y. Amores M.D.

Medicine and government

On the last day of the West Virginia Legislature's recent regular session, I read a very negative editorial criticizing our lawmakers for what they had and had not accomplished. It in effect said that at the crack of midnight everyone could breathe a sigh of relief because the session would be over.

From the opportunities I had to work with the Legislature this past session, I can tell you that our delegates and senators do not get enough credit for all that they do in 60 days. In this brief amount of time, approximately 1,500 bills are introduced and our delegates and senators must be able to determine some type of action on each one - - decisions which may affect the citizens of our state for generations.

Is it any wonder then that lawmakers often do not have a complete understanding of most of the legislation they must act on?

This unfortunate fact is especially true with many health care issues, particularly since there are so few legislators with backgrounds or experience in providing health care services. Each day it seems as though more and more laws are being passed to regulate health care which are affecting the physician-patient relationship.

To become physicians, we have to complete four years of pre-medical education, four years of medical school, and two to eight years of residency training, so we most certainly know what is best for our patients. We should be the only individuals to say how long a patient needs to be hospitalized - - We should be the only ones to prescribe the medicines' patients need - - We should know if a second opinion is needed - - We should know who is or is not qualified to deliver a baby - - AND WE SHOULD BE ABLE TO PRACTICE THE ART OF HEALING WITHOUT THE FEAR OF EXCESSIVE MALPRACTICE AWARDS.

When did we let the practice of medicine get so far out of our hands and into those of others? It is time to take action.

It is an obvious fact that only through more political involvement can we make government understand health care from our perspective. We are very lucky to have Dr. John Huntwork, Nancy Kessel, Barbara Sims and J. D. Beane as delegates. These four legislators know first-hand the issues and problems facing the medical profession today and are doing an excellent job of presenting them to their fellow lawmakers.

But, they are just four voices out of 134 legislators and they must have more help. I am so pleased that WVSMA President-Elect Dr. Robert P. Pulliam has chosen to enter the political arena by running for the West Virginia House of Delegates. I can only hope that more physicians will run for office, donate to WESPAC, as well as get to personally know the candidates from their local areas, assist them with their campaigns, and educate them on health care issues.

In the past few years, I feel the WVSMA and physicians in the state have made real progress in becoming more polically astute and respected by those in power. It has enabled the development and presentation of a positive legislative priority program and given strength to communicate concerns of ill-conceived public policy health issues. Let us not lose the momentum.

This is an election year, and now more than ever is the time to get involved. As your president I am just one voice, but when every member of the WVSMA joins with me our voices can be heard loud and clear. Only through our own efforts can we regain control of our profession and the destinies of our patients and practices.

Constantino Y. Amores, M.D.

Special Reminder

If you are not registered to vote, the last day to do so before the May Primary Election is April 13.

Benefits without involvement!

Soliciting membership to the West Virginia State Medical Association is often met with the comment "What have they ever done for me?" or "I don't get anything out of membership - - it is not worth the dues!"

There may have been a time when this type of comment was true - - but no longer. Consider these events which have taken place during the past year.

Medicaid is now paying physicians a reasonable fee for the services they provide. With the institution of the physician provider tax, increased federal funds are being received by West Virginia physicians. This occurred because state government and physicians worked together - - in fact, government gave the WVSMA essential veto power over the concept. WVSMA members such as Drs. Dennis Burton, Tom Sporck, John Hunt, Steve Sebert, Charles Whitaker, Harry Fortner and Glenn Crotty, worked many hours to help make this new physician provider tax a reality.

This increase in Medicaid reimbursement is not just benefiting WVSMA members, but all state physicians who accept Medicaid patients. Yes, to some - - benefits without involvement.

The WVSMA filed, at considerable expense, an amicus brief in the Biwas malpractice appeal. As a result, the West Virginia State Supreme Court upheld the constitutionality of the $1 million dollar cap on non-economic damages in malpractice awards. These efforts were led by WVSMA Council Chairman Dr. Michael Stump and the members of the WVSMA Council.

This legal victory not only helps protect WVSMA members against excessive malpractice awards, but all state physicians. Yes, to some - - benefits without involvement.

Remember the Blue Cross/Blue Shield bankruptcy! WVSMA, again at considerable expense, joined with other groups in a suit against the national BC/BS. The recent settlement of this case resulted in an increase in the amount of money to be returned to physicians with outstanding bills from approximately 12 cents on the dollar to 50 cents on the dollar. Of course, this effort will aide not just WVSMA members who have not been reimbursed for caring for patients insured by BC/BS, but all state physicians with the same outstanding debts. Yes, to some - - benefits without involvement.

During the recent legislative session, the WVSMA published a newsletter entitled "*Legislative Update*" to keep physicians abreast of the issues affecting the medical community. This publication was sent not just to WVSMA members, but to all licensed physicians in the state. Yes, to some - - benefits without involvement.

Currently, the Health Care Planning Commission's subcommittees are hard at work with a deadline of September 1992. Twenty-seven physicians, all WVSMA members, serve on these subcommittees as volunteers. In addition, WVSMA Councilor-at-Large Dr. Derrick L. Latos serves serves as a full commission member.

The activities I have described and the physicians involved represent only a small number of the WVSMA members who spend eons of uncompensated time working for the betterment of medicine and patient health in West Virginia. These physicians feel that involvement produces benefits for all of us.

To those physicians who accept the benefits without involvement, we beg your participation. With your talents added constructively to those of all of the other WVSMA members, the WVSMA can become a more powerful force for the betterment of health care in West Virginia, and an efficient and significant advocate for the patients in the health care system.

Robert P. Pulliam, M.D.
WVSMA President-Elect

"Can I see another's woe

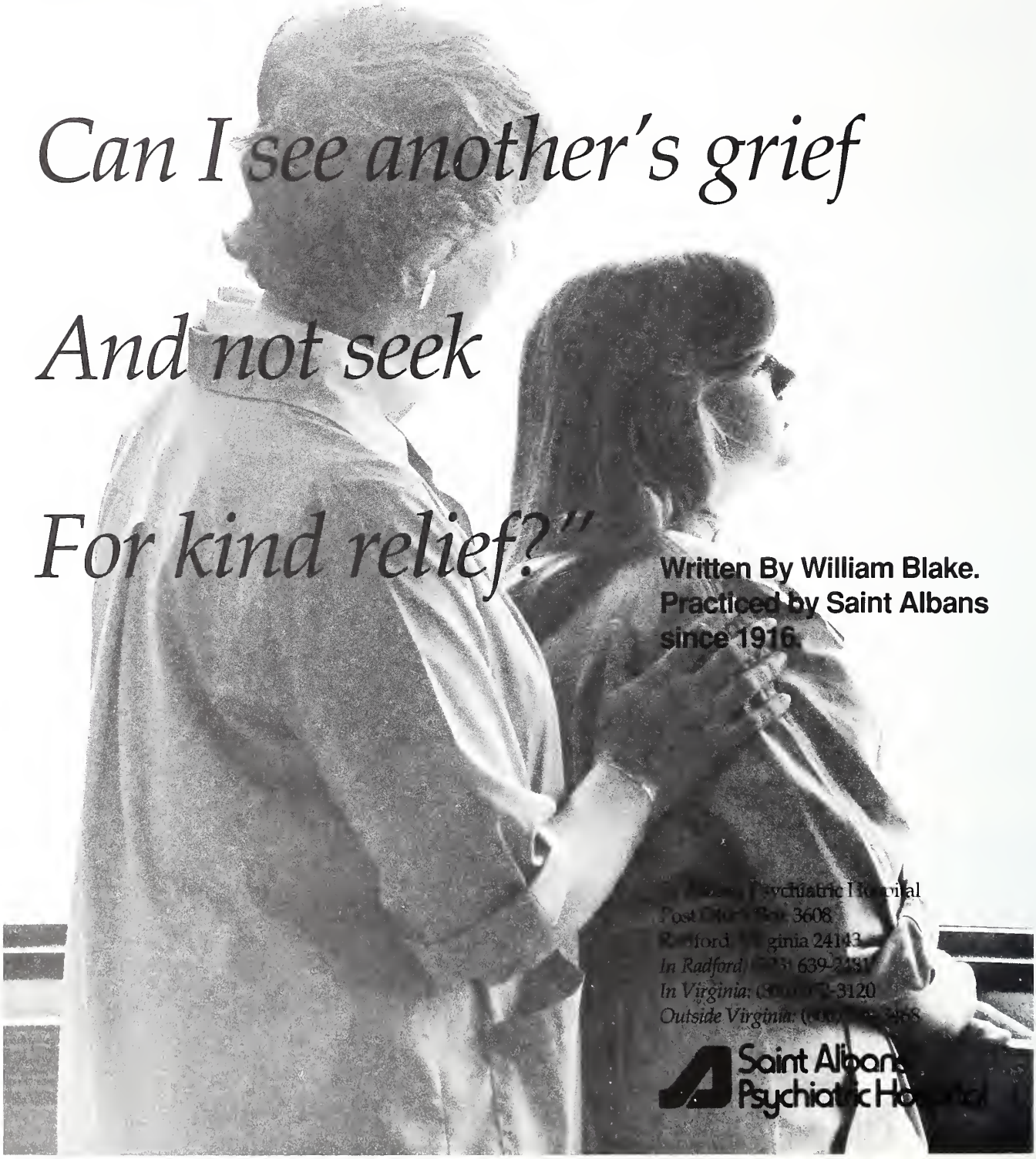
And not be in sorrow too?

Can I see another's grief

And not seek

For kind relief?"

Written By William Blake.
Practiced by Saint Albans
since 1916.



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Think of it as 9-1-1 for America's health care system.

Today, a number of Americans think the answer to our health care problems is a single-payor, national system.

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Health Access America

The AMA proposal to improve access to affordable, quality health care.

American Medical Association

Physicians dedicated to the health of America

Physicians, volunteers operating free clinic in Parkersburg

Realizing the need to provide free health care for those individuals who are falling through the cracks of existing programs, Drs. Gene Sims and Frank Schwartz of Parkersburg, organized local physicians, the Wood County Ministerial Alliance and the Parkersburg Area Coalition for the Homeless, and recently opened the Good Samaritan Clinic, Inc. on Market Street.

This totally volunteer clinic has over 50 physicians who donate their time at the facility, as well as another 30 to 40 doctors who take care of patients free-of-charge on a referral basis. In addition to the physicians, the clinic also has a large volunteer staff of dentists, nurses, social workers, clerical workers and pharmacists.

"The response from the local community has been overwhelming," Dr. Gene Sims, president of the Board of Directors of the Good Samaritan Clinic, Inc. said. "Church congregations, civic groups, social organizations, businesses, health care professionals and hundreds of local residents have donated money, equipment, supplies or their time to make sure the clinic is a success. Even the site we use for the clinic was donated to us rent-free by Parkersburg Medical Associates. It is very gratifying to know that since the clinic opened in September, we have cared for around 600 patients," he added.

Patients are seen at the clinic every Monday and Wednesday night. On Mondays, patients are evaluated by nurses, who then make appointments for them if they need to be seen by a physician. A social worker also assists on Monday nights, as do other volunteer support staff. Then on Wednesdays, two physicians volunteer their time to care for the patients with the assistance of several nurses. Usually 25 patients are seen on these evenings and a pharmacy is also open at the clinic during this time under the supervision of pharmacist Robert Lincicome.

Dr. Gene Sims, president of the Board of Directors of the Good Samaritan Clinic, Inc. in Parkersburg, reviews a patient's chart with RN Stephanie Black.

"We are so pleased that we can now provide free medications for our patients, as well as free medical care," Catherine Ralsten, executive director of the Good Samaritan Clinic, Inc. said. "The local hospitals have also been very generous and are receiving our patients on a rotating monthly basis. In addition, dentists come to the clinic twice a month to screen patients and several are performing procedures in their offices without a fee. The outpouring of assistance from the local medical community has been tremendous, and each day, more and more health care professionals are calling to see how they can help," she added.

According to Ralsten, the clinic's mission is to improve health in the community by providing a facility where volunteers can deliver quality patient care and educate patients in an atmosphere of social concern. Funding for the clinic has mainly come from private donations, but grants are currently being sought to keep the facility in operation and expand services in the future because the need is so great.

"One of the nurses was trying to take a patient's blood pressure and discovered he was wearing many layers of clothing," Dr. Sims said. "He told her that he had to keep on as many clothes as possible because it gets very cold under the bridge where he sleeps. It's the reality of situations like these that keep everyone dedicated to volunteering at the clinic. All of the volunteers talk about how they go home after working with a good feeling because they have been able to help other people who really need it," he elaborated.

Good Samaritan Clinic, Inc.

Legislative Reception and Briefing

Dr. Tom Sporck gestures as he gives an update on the activities of the Legislature to the physicians attending the WVSMA's Legislative Briefing, which was held at St. Francis Hospital on January 23. Assisting him at the briefing were Thom Stevens, WVSMA associate executive director; Amber Kuhl, legislative assistant; and Steve Haid, lobbyist.

Ohio County Delegates Gil White (left) and Greg Martin (front center) discussed issues with Dr. James Comerci, WVSMA vice president; Dr. John Holloway; Janie Altmeyer, WVSMAA president; and Ree Cook Reiter, executive secretary of the Ohio County Medical Society, at the WVSMA's Legislative Reception at the Charleston House - Holiday Inn on January 23.

Delegate Nancy Kessel, who is also a member of the WVSMAA Long Range Planning Committee, enjoyed sharing views with Alice Edwards, AMAA Eastern Regional vice president, and Doris Briley, president of the Kanawha County Medical Society Auxiliary.

WVSMA President Dr. Constantino Y. Amores enjoyed visiting with Drs. Doug McKinney and Gene Sims at the Legislative Reception.

COLA offers help with CLIA '88 rules

With the release of the final rules on the Clinical Laboratory Improvement Amendments of 1988 (CLIA '88), physicians' office laboratories throughout the United States will, for the first time, face regulation by the federal government. Physicians with in-office laboratories now face the three options of closing their laboratories; submitting to inspection and certification by federal or state officials; or choosing accreditation through the Commission on Office Laboratory Accreditation (COLA).

COLA is a private, non-profit organization sponsored by the American Academy of Family Physicians, the American Medical Association, the American Society of Internal Medicine and the College of American Pathologists. These organizations are encouraging physicians to enroll in COLA to meet the demands of CLIA '88.

Since 1988, COLA has accredited more than 1,200 office laboratories through its voluntary Quality Leadership Program. With the implementation of CLIA '88, the government will launch a program to certify physicians' office laboratories. At the same time, COLA expects to receive deeming authority from the government, giving physicians the option of selecting COLA or the federal government to certify their office laboratories.

For more information, contact Bill Kutson at (301) 588-5882.

Kidney research grants available

Baxter Healthcare Corporation of Round Lake, Ill., has set April 10 as the deadline for their seventh round grants for kidney research.

The two categories of research to be funded in this round will be:

1. The Role of Cytokines in the Pathogenesis of Renal Disease; and

2. The Impact of Pre-ESRD Diagnosis and Treatment on the Outcome of Maintenance Dialysis and/or Transplantation.

For more details, contact Lee Henderson, M.D., F.A.C.P., executive director of Baxter's Extramural Grant Program at (708) 270-5200.

NRH schedules seminars on disabilities act

The National Rehabilitation Hospital's (NRH) Assistive Technology Program-ADA Health Care Facility Access Project has received funding from the United States Department of Justice to present a series of 10 one-day technical assistance seminars on voluntary compliance by health care providers with the Americans with Disabilities Act.

The one-day seminars will be held in several regions of the country and will address physical, communication, and programmatic barriers in the health care system. According to Jan Galvin, director of NRH's Assistive Technology Program, "A great deal of confusion persists about how the ADA will affect health care providers since Titles II and III provisions took effect on January 26. Clinics, hospitals, community mental health centers, and nursing homes, as well as a host of other health care providers need to know what the correct actions are to come into compliance with the ADA."

For more information regarding seminar dates and locations, or ADA technical assistance, contact Jane Bennett or Bill Peterson at (202) 877-1974 or TDD (202) 726-3996.

Society for Autistic Children plans spring conference

"Empowerment of Parents and Professionals Through Information," is the title of the Annual Spring Conference for the West Virginia Society for Autistic Children, which will take place at the Radisson Hotel in Huntington, April 3 and 4.

Featured speakers include Bernard Rimland, Ph.D., founder and director of the Autism Research Institute; Margaret L. Bauman, M.D., assistant professor of neurology at Harvard Medical School; Lorna Jean King, O.T.R., F.A.O.T.A., founder of the Center for Neurodevelopmental Studies; and Michael Powers, Psy.D., director of the Berkshire Hills Learning Center.

For more information about the meeting, phone Sue McClelland at 525-8014 or Wanda Wells at 696-2332.

Antonio Palladino ob/gyn lectureship established at WVU

Palladino

The Antonio Palladino Lectureship in Obstetrics and Gynecology has been established at the WVU School of Medicine by Adriana Palladino in honor of her husband, a former faculty member and WVSMA member, who died last year on June 16.

A native of Italy, Dr. Palladino received his medical degree with highest honors from the University of Naples. He served on the WVU School of Medicine faculty from 1967-74. He was a clinical professor or obstetrics and gynecology at WVU Hospitals, and was also an attending physician at Monongalia General Hospital.

Contributions to the endowed lectureship can be made through the WVU Foundation Inc., 3168 Collins Ferry Road, Morgantown, WV 26505.

First WV Interplast medical expedition visits Equador

Seven West Virginians traveled to Azogues, Ecuador recently in the first medical expedition organized by Interplast West Virginia.

Participants included Dr. David Fogarty, clinical associate professor of surgery at WVU; his wife, Darlene Fogarty, who was trip coordinator; Elizabeth Hupp, R.N., of the WVU Department of Surgery; Dr. Richard Eller, of the WVU Department of Anesthesiology; Dr. Brian Kradel, an anesthesiology resident at WVU Hospitals; Sandy Lea, R.N., a former WVU employee now living in Palm Harbour, Fla.; and Dr. Mike Carter, a WVU graduate practicing anesthesiology in Columbia, S.C.

Interplast provides plastic and reconstructive surgery to children with deformities and disfiguring scars in Third World countries.

Washington, D.C. site of national rural health conference

The National Rural Health Association will hold its 15th annual national conference on rural health, "Rural Health: Caring for the Country," May 6-9, at the Hyatt Regency Crystal City Hotel in Washington, D.C.

The conference is designed to:

- Develop practical skills and techniques in health services administration, organization and research;
- Present practical clinical sessions of interest to rural health providers;
- Showcase current policy issues affecting rural health services; and
- Report the results of research applicable to rural health service administrators and providers.

For registration information, contact the NRHA at (816) 756-3140.

Annual symposium on infectious diseases planned

The Baltimore Convention Center will be the site of "Infectious Diseases in Everyday Medicine," the second annual symposium sponsored by the Division of Infectious Diseases, Department of Medicine at the University of Maryland School of Medicine.

Directed at primary care providers as well as infectious disease specialists, the symposium is approved for 12 credit hours in Category I of the Physician's Recognition Award of the AMA; for 12 prescribed hours by the American Academy of Family Physicians; and for 12 hours of ACEP Category I credits by the American College of Emergency Physicians.

For more details, contact Eunice Katz at (410) 328-7560.

Rural Health:
CARING
for the country

Pathologists to convene at WVU

The West Virginia Association of Pathologists will meet April 24-25 at West Virginia University in Morgantown.

A reception will be held the evening of April 24 and the scientific session is scheduled for the next day. The meeting will be eligible for up to 6 Category 1 CME credits.

Vendors will be presenting a broad range of pathology needs including Olympus microscopes; Saunders, Lippincot, and Mosby textbooks; and computer hardware and software, including 3M Health information Systems. Instrument manufacturers will also have exhibits and an automated cytology screening technology program will be on display.

For more information, contact Carol Boyd, M.D., at 293-2092.

Super Cities Walk to benefit MS

To raise funds for the West Virginia Chapter of the National Multiple Sclerosis Society, the Super Cities Walk will take place on Saturday, April 4 in Huntington and on Sunday, April 5 in Charleston.

Walkers will receive a light breakfast, food and drinks at rest stops along the route, a picnic lunch and support from medical volunteers. A number of prizes will be available to participants who meet certain pledge goals.

Interested participants and volunteers should phone 342-5295 or 1-800-628-5645.

WV Academy of Ophthalmology annual meeting set

The 45th Annual National Spring Meeting of the West Virginia Academy of Ophthalmology will be held at The Greenbrier in White Sulphur Springs from April 23-26.

This year's meeting will feature Drs. Eugene M. Helveston, Eve J. Higginbotham, John S. Kennerdell and Jerald L. Tennant.

For more details, contact Patricia Schumann at 293-3757.

AHA releases new medical journal

The American Heart Association has begun publishing a new bi-monthly journal entitled *Heart Disease and Stroke.*

To subscribe to this new scientific magazine, contact the AHA at 346-5381.

County Societies

McDowell

At the February meeting, the presentation "Thrombolytic Therapy in Acute M.I. and Treatment of Hypertension," was given by Naeem A. Qazi, M.D., F.A.C.C., a cardiologist from Bluefield.

Dr. Herland reported on the January meeting of the WVSMA Council and also announced that WVSMA President-Elect Dr. Robert Pulliam of Beckley was running for the West Virginia House of Delegates and would like the members support.

In other new business, the members voted to make a $1,000 donation to the McDowell County Library and the Humane Society.

Monongalia

Dr. John Pearson, the society's secretary, spoke on the subject of health care delivery in Canada for the February meeting.

In new business, Dr. Pearson presented Drs. Carol Reid, Charles Whiteman, Larry Rhodes, Terry Pritt, Nick Ghaphery, Unyime Nseyo, Harry Bishop, Patricia Caballero, Hassan Ramadam, George Simmons Jr., James Holehouse and John Rollins for membership via second reading. Dr. Frost requested the society support the Cooper's Rock Foundation in purchasing a parcel of land, and Dr. King discussed the need for Medicare and Medicaid codes to be standarized in the interest of uniformity.

One of the other topics talked about was the misleading ads in the local telephone book's Yellow Pages, in which non-M.D.s are passing themselves off as M.D.s. This issue was referred to the society's Medical Practice Committee.

Continuing Education

Listed on this page are some of the upcoming CME programs which will be held in the state.

The programs this month were compiled by: Patricia Barnhart, WVSMA loss control coordinator; Robin Rector, coordinator of CME for Charleston Area Medical Center; Cynthia Kemp, WVU conference planner; David Bailey, MU director of CME; and Thelma Wilson, education coordinator of the Raleigh County Medical Society.

Further details about these CME activities may be obtained by calling Barnhart at 925-0342; Rector at 348-9580; Kemp at 293-3937; Bailey at 696-7018; and Wilson at 253-6341. Other state and national meetings are listed in the Medical Meetings Section of the *Journal*.

If you would like to have the CME programs offered by your institution or association for physicians published in the *Journal*, please contact Nancy Hill, managing editor, at 925-0342.

West Virginia State Medical Association - Charleston

April 25 - "First Generation Loss Control Seminar," Ramada Inn, South Charleston.

CAMC/WVU Health Sciences Center - Charleston

March 28 - "Proposal Preparation of Biomedical and Health Care Grants," 8 a.m. - 4:30 p.m., 4th floor, WVU Health Sciences Center.

April 3 - "19th Annual Newborn Day," 7:30 a.m. - 4:30 p.m., auditorium, WVU Health Sciences Center.

April 11 - "Swallowing Disorders Symposium," 7:30 a.m.-4:30 p.m., auditorium, WVU Health Sciences Center.

April 11-12 - "Advanced Trauma Life Support Course," Women and Children's Hospital.

April 13 - "Infant Physical Assessment," Boardroom A, Women and Children's Hospital, teleconference.

April 25 - "Wound Care Management," 7:30 a.m. - 4:30 p.m., auditorium, WVU Health Sciences Center

April 27 - "Neonatal Home Care," 12:30 p.m., Boardroom A, Women and Children's Hospital, teleconference.

April 29 - "Research Day," 8 a.m. - 1 p.m., auditorium, WVU Health Sciences Center.

WVU Health Sciences Center - Morgantown

April 4 - "7th Medicolegal Investigation of Death Seminar."

Marshall University - Huntington

March 31 - "5th Annual Research Day," Holiday Inn-Gateway, Barboursville

Raleigh County Medical Society - Beckley

March 31 - "A Look at the Echocardiogram," Jerry Crook, M.D., Black Knight Country Club, 6:30 p.m.

April 2 - "A Look at the Nicotine Patch Therapy," Saul Shiffman, Ph.D., Black Knight Country Club, 6:30 p.m.

April 9 - "The Effect of Antihypertensive Treatment on Cardiovascular Morbidity and Mortality," Mohamed Sekkarie, M.D., Black Knight Country Club, 6:30 p.m.

Outreach Programs

Key to Sponsors

★ *WVU Health Sciences Center, Morgantown*

☐ *CAMC/WVU Health Sciences Center, Charleston*

Logan ☐ Logan General Hospital, April 24, noon, "Care of Brain Tumors," Constantino Y. Amores, M.D.

Man ☐ Man Appalachian Regional Hospital, April 21, 7 p.m., "Pediatric Surgical Problems," Eduardo Suson, M.D.

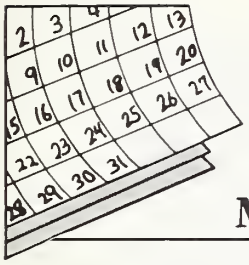
Montgomery ☐ Montgomery General Hospital, April 1, 12:30 p.m., "Care of the Cervical Spine Injuries," Alfredo Velasquez, M.D.

Point Pleasant ☐ Pleasant Valley Hospital, April 23, noon, speaker and topic to be announced

Ripley ☐ Jackson General Hospital, April 10, noon, "Medical Research Administration and Grants/Contracts," Mary Francis Blanton, M.Ed.

Spencer ☐ Roane General Hospital, April 21, 12:30 p.m., "Sports Medicine," David Soulsby, M.D.

South Williamson, Ky. ☐ South Williamson Appalachian Regional Hospital, April 23, 5:30 p.m., topic and speaker to be announced.



Medical Meetings

April

1-4—American College of Physicians, Washington, D.C.
3—Empowerment of Parents and Professionals Through Information: 1992 Annual Spring Conference of the West Virginia Society for Autistic Children, Huntington.
4-9—College of American Pathologists, Boston.
10-12—40th Annual Scientific Assembly of the West Virginia Chapter of the American Academy of Family Physicians, Charleston.
11—Osteoporosis: From the Osteoclast to Daily Practice, Georgetown University Medical Center, Washington, D.C.
11—Rheumatology for the Non-Rheumatologist, Ohio State University, Columbus, Ohio.
12-15—American Society of Contemporary Medicine and Surgery, Chicago.
12-15—American Society of Cataract and Refractive Surgery, San Diego.
12-16—American College of Cardiology, Dallas.
20-21—Medical Communications in the 21st Century: A New Global Outlook, International Medical Institute, Atlanta.
23-24—Infectious Diseases in Everyday Medicine, Department of Medicine, University of Maryland, Baltimore.
23-26—West Virginia Academy of Ophthalmology 45th Annual National Spring Meeting, White Sulphur Springs.
24-25—West Virginia Association of Pathologists, Morgantown.
24-25—Sports Medicine, Ohio State University, Columbus, Ohio.
29-May 2—West Virginia Chapter/American College of Surgeons, White Sulphur Springs.

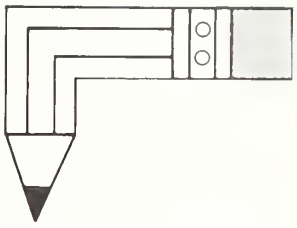
May

1—Seminar in Pulse Dye Cutaneous Laser Surgery: A "Hands-On" Supervised Workshop for Physicians, Georgetown University Medical Center, Washington, D.C.
2—Cancer Pain Management, Ohio State University, Columbus, Ohio.
2-7—American Psychiatric Association, Washington, D.C.
7-9—38th Annual Meeting of the American Society for Artificial Internal Organs, Nashville, Tenn.
7-9—Second Annual Cardiovascular Diseease Review and Update, Rush Heart Institute and Rush-Presbyterian-St. Luke's Medical Center, Chicago.

For More Information . . .

Contact the Journal for additional information about most of the above meetings. Call (304) 925-0342.

Poetry Corner



Black Water

Mixed rock formations shaped
By countless years of geologic shifts
And glacier's mighty work,
Which forged and tempered them;
Moot witness to the mighty forces
Which raw nature sole commands;
Then worn by water's constant flow
As it rushed to lower ground
And left its mark through age on age;
Forming there a waterfall,
Awesome in its beauty and its power.
Black water, colored by the solvents
In its flow, cascades upon the rocks
And forms a pool below, then hurries on.
Such beauty to behold; and know
It is unique in all the world.

E. Leon Linger, M.D.

West Virginia Burning

Acrid smoke boils
Among the hills and hollows;
Fires feeding on the dry
Limbs and branches of hope.

Black crosses silhouette
Against the scarlet sky;
A show for the world to see - -
Staged by envy and fear.

Matewan, Auschwitz, Dubrovnik - -
What does it matter,
When man's hate
Turns on himself.

Peter Christian Raich, M.D.

Please address your submissions for Poetry Corner to: Stephen D. Ward, M.D., Editor, West Virginia Medical Journal, Box 4106, Charleston, WV 25364.

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150 mg b.i.d.

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1. Data on file, Lilly Research Laboratories. *See accompanying page for prescribing information.*

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Brief Summary. Consult the package insert for complete prescribing information.

Indications and Usage: 1. *Active duodenal ulcer*—for up to 8 weeks of treatment at a dosage of 300 mg h.s. or 150 mg b.i.d. Most patients heal within 4 weeks.

2. *Maintenance therapy*—for healed duodenal ulcer patients at a dosage of 150 mg h.s. at bedtime. The consequences of therapy with Axid for longer than 1 year are not known.

3. *Gastroesophageal reflux disease (GERD)*—for up to 12 weeks of treatment of endoscopically diagnosed esophagitis, including erosive and ulcerative esophagitis, and associated heartburn at a dosage of 150 mg b.i.d.

Contraindication: Known hypersensitivity to the drug. Because cross sensitivity in this class of compounds has been observed, H_2-receptor antagonists, including Axid, should not be administered to patients with a history of hypersensitivity to other H_2-receptor antagonists.

Precautions: *General*—1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Dosage should be reduced in patients with moderate to severe renal insufficiency.

3. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

Laboratory Tests—False-positive tests for urobilinogen with Multistix® may occur during therapy.

Drug Interactions—No interactions have been observed with theophylline, chlordiazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450 enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increased serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility—A 2-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a 2-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups.The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a 2-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in 1 fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in 1 fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Worldwide, controlled clinical trials included over 6,000 patients given nizatidine in studies of varying durations. Placebo-controlled trials in the United States and Canada included over 2,600 patients given nizatidine and over 1,700 given placebo. Among the adverse events in these placebo-controlled trials, only anemia (0.2% vs 0%) and urticaria (0.5% vs 0.1%) were significantly more common in the nizatidine group. Of the adverse events that occurred at a frequency of 1% or more, there was no statistically significant difference between Axid and placebo in the incidence of any of these events (see package insert for complete information).

A variety of less common events were also reported; it was not possible to determine whether these were caused by nizatidine.

Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to 3 times the upper limit of normal, however, did not significantly differ from that in placebo patients. All abnormalities were reversible after discontinuation of Axid. Since market introduction, hepatitis and jaundice have been reported. Rare cases of cholestatic or mixed hepatocellular and cholestatic injury with jaundice have been reported with reversal of the abnormalities after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in 2 individuals administered Axid and in 3 untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of anti-androgenic activity due to nizatidine. Impotence and decreased libido were reported with similar frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Anemia was reported significantly more frequently in nizatidine than in placebo-treated patients. Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H_2-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental—Urticaria was reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity—As with other H_2-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. The ability of hemodialysis to remove nizatidine from the body has not been conclusively demonstrated; however, due to its large volume of distribution, nizatidine is not expected to be efficiently removed from the body by this method.

PV 2093 AMP [101591]

Additional information available to the profession on request.

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YOCON®

YOHIMBINE HCl

Description: Yohimbine is a 3a-15a-20B-17a-hydroxy Yohimbine-16a-carboxylic acid methyl ester. The alkaloid is found in Rubaceae and related trees. Also in Rauwolfia Serpentina (L) Benth. Yohimbine is an indolalkylamine alkaloid with chemical similarity to reserpine. It is a crystalline powder, odorless. Each compressed tablet contains (1/12 gr.) 5.4 mg of Yohimbine Hydrochloride.

Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalmic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon® is indicated as a sympathicolytic and mydriatric. It may have activity as an aphrodisiac.

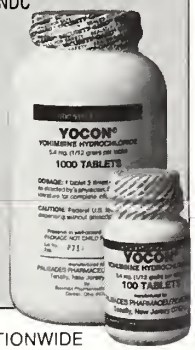
Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.[1,2] Also dizziness, headache, skin flushing reported when used orally.[1,3]

Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.[1,3,4] 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to ½ tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.[3]

How Supplied: Oral tablets of Yocon® 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.



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1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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Department of Health & Human Resources

Bureau of Public Health News

This page of material is submitted and paid for by the Bureau of Public Health.

Breast, cervical cancer incidence registry developed

The Bureau of Public Health's Breast and Cervical Cancer Screening and Follow-up Program includes development of a Breast and Cervical Cancer Incidence Registry (BCCIR) to monitor incidence trends in West Virginia.

Data collection began in August in the 11 hospitals with existing tumor registries. Since then, other providers have been added, including hospitals without tumor registries, pathology laboratories and physicians who might treat carcinoma in situ of the cervix outside hospital settings. To include women who go out of state for diagnosis and treatment, the BCCIR staff will contact central registries in neighboring states.

Specific data will be collected on diagnoses from January 1, 1991 forward, and all 1991 data should be entered into the registry by late summer. When this reporting is complete enough for analysis, reports will be generated for each cancer site. This data will be linked with 1991 census data for incidence, age-adjusted and age-specific, so rates can be calculated by gender for specific regions and the state.

Information from the BCCIR will ultimately be used in directing resources to high-risk populations for prevention and early detection of breast and cervical cancer in West Virginia.

For more information, contact Beverly Crowder at 348-5358.

Two new COPC sites chosen

Two primary care centers, the E.A. Hawse Health Center in Hardy County and the Monroe Health Center in Monroe County, have recently been selected as the state's newest Community-Oriented Primary Care (COPC) sites. These centers will receive financial and technical assistance in the implementation of community health promotion activities.

COPC is a community health promotion model in which a primary care center takes the lead in working with the community to improve the health of its citizens through education, behavior change and community mobilization. This statewide initiative is already underway in primary care centers in Barbour, Fayette, Lincoln, Pendleton and Tucker counties.

For more information, contact Elise Jensen with the Division of Health Promotion at 348-0644.

Infectious medical waste permit deadline nears

Infectious medical waste facilities generating more than 50 pounds of waste in a one-month period have only until May 7 to apply for a permit through the Bureau's Office of Environmental Health Services. This is in accordance with the Department of Health and Human Resources' Infectious Medical Waste Rule, which was emergency filed this month with the secretary of state.

The rule covers waste generation, handling, storage, transportation, treatment and disposal. Small quantity generators (50 pounds or less per month) will not need permits, but must develop and retain on file a waste management plan by June 23.

OEHS staff can provide technical assistance concerning the rule, alternative treatment technology and other program issues. Staff members are also available to attend county medical society meetings to discuss details of the rule.

For more information, contact Joe Wyatt at 348-2981.

April declared Breastfeeding Education Month

Breastfeeding is seen by many as the superior method of nourishing and nurturing infants, and the U.S. Surgeon General recommends that health care providers actively promote breastfeeding for all families.

In response, the Bureau's Women, Infants and Children's (WIC) Program is implementing a campaign to promote and increase the public awareness and incidence of breastfeeding, and they have recognized April as "Breastfeeding Education Month."

During the month, WIC staff members will be sending public service announcements and press releases to statewide media and distributing breastfeeding education videos to delivery hospitals for staff education. They will also kick-off their Breastfeeding Peer Counselor Program to provide promotion, education and on-going post-partum support for nursing mothers.

For more information on breastfeeding promotion, contact Connie Neuner at 348-0030.

Bureau names new director of Laboratory Services

Frank W. Lambert, Dr.P.H., is the new director of Laboratory Services for the Bureau of Public Health. Dr. Lambert assumes his duties after more than 28 years of experience with the Virginia State Health Department. He most recently served as the director of Virginia's Consolidated Microbiology Laboratory.

Dr. Lambert replaces Charlotte Billingsley who has been serving as acting director. She will now take on the role of associate director for the laboratory's environmental division.

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- ☐ c. A genie.
- ☐ d. A knight in shining armor.
- ☑ e. A CPA.

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West Virginia Society of CPAs

WEST VIRGINIA UNIVERSITY HEALTH SCIENCES CENTER

Compiled from material furnished by the West Virginia University Health Sciences Center News Service, Morgantown.

Morgan named chair of pathology

Morgan

Dr. Winfield S. Morgan, who has been serving as interim chair of the Department of Pathology since 1989, has now been appointed chair of this department.

A member of the WVU School of Medicine faculty since 1974, Dr. Morgan received his medical degree from Temple University and served a residency in pathology at Massachusetts General Hospital in Boston.

Dr. Morgan spent a year in Oxford, England, as a British-American Exchange Fellow of the American Cancer Society and was a special research fellow of the National Cancer Institute.

WV applications for medical school increase 20 percent

The number of West Virginia residents applying to the WVU School of Medicine increased by nearly 20 percent over the past year, according to Dr. John Traubert, the school's associate dean.

"This is the largest group of West Virginia applicants we've seen in six years," Dr. Robert D'Alessandri, dean of the School of Medicine said. Nearly all of the spaces in the class are reserved for state residents.

A total of 1,347 applications have been submitted for the 88 positions available in the medical school class which enters in August 1992, Dr. Traubert said. Of the 202 West Virginia residents who applied, 133 are male and 69 are female.

The overall number of applicants is down slightly from last year's 1,396 because of a decrease in the number of out-of-state applications.

"We admit about 10 non-residents each year and most of these individuals are people with other strong ties to West Virginia," Dr. Traubert said. "When non-residents call, we let them know that their chances are slim."

CONSULT now listing continuing education events

The West Virginia CONSULT Network, the WVU Health Sciences Center's computer network for health care providers around the state, began a computerized listing of continuing education programs for the state's health care professionals in February.

"CE Link," the new program, allows physicians, nurses, pharmacists, and other health care professionals at CONSULT sites to search a database containing details on continuing education programs offered throughout West Virginia, and on selected programs in surrounding states and across the country.

Searches can be conducted by specialty, target audience, date, location, and accrediting bodies. It is currently available at St. Joseph's Hospital, Parkersburg; Jackson General Hospital, Ripley; Calhoun General Hospital, Grantsville; and Sistersville General Hospital, Sistersville. This spring, new sites will be added at United Hospital Center, Clarksburg; St. Joseph's Hospital, Buckhannon; Stonewall Jackson Hospital, Weston; and Braxton County Memorial Hospital, Gassaway.

Eventually, CONSULT will allow health care workers throughout the state to access medical journals, computer databases, and other information sources.

For more details, or to list programs with CE Link, please call Linda Jacknowitz at 1-800-WVA-MARS or (304) 293-4996.

Budget cuts won't affect rural health care program

The one percent budget cut imposed by Governor Gaston Caperton on the state's higher education system will not reduce the WVU Health Sciences Center's commitment to rural West Virginia, according to Dr. Robert D'Alessandri, dean of the WVU School of Medicine.

"We are going ahead with all of our plans for rural health care," Dr. D'Alessandri said. "The School of Medicine will make cuts in administrative areas to meet the one percent reduction in the current year's budget."

Dr. D'Alessandri says combining the position of dean of medicine and vice president for health sciences, the post he will hold beginning July 1, will contribute to these savings.

Timberlake, Collins lecture in China

Timberlake

Dr. Gregory Timberlake, associate professor of surgery, and Sue Collins, RN, MSN, trauma clinical nurse specialist at the Jon Michael Moore Trauma Center at WVU, presented trauma education courses to surgeons at the 500-bed Pu Dong Central Hospital in Shanghai.

Their visit was the third exchange event of the WVU School of Medicine's Program in International Health. In 1991, two surgeons from Shanghai worked at WVU Hospitals for three months and in February, Dr. Rick Vaughn of the WVU Department of Surgery assisted at Aga Khan University Medical Center in Pakistan.

MARK YOUR CALENDAR

Charleston Area Medical Center
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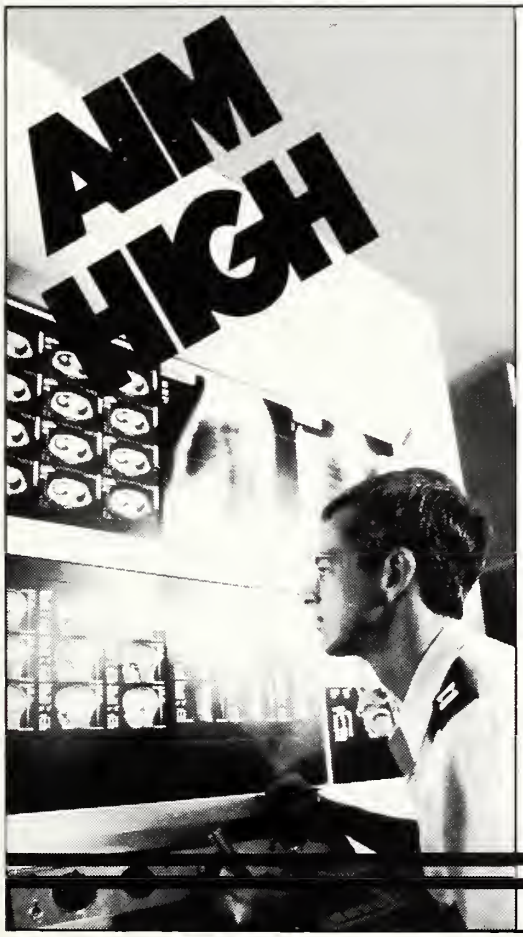

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AIR FORCE

MU School Of Medicine News

Compiled from material furnished by the Office of University Relations, Marshall University, Huntington.

New anatomy and cell biology chairman named

Dr. William Blocher Rhoten has been appointed as the new chairman of the Department of Anatomy and Cell Biology at the Marshall University School of Medicine.

Dr. Rhoten comes to Marshall from the New Jersey Medical School of the University of Medicine and Dentistry of New Jersey, where he had been an associate professor of anatomy. On occasion, he served as acting chairman of that school's Department of Anatomy and Cell Biology. He also has taught at a Ugandan medical school as a senior Fulbright scholar, at the University of Cape Town, and at the University of Illinois.

"Dr. Rhoten is an outstanding addition to our school," Dr. Charles H. McKown, dean of Marshall's School of Medicine said. "He already is working to develop a learning resource facility for students which will include electronic logic systems for acquiring and analyzing information."

Dr. Rhoten also is making plans to revise the human gross anatomy course to better enable students as future physicians and to more fully support the curriculum changes coming through the Kellogg initiative and the Caperton plan, Dr. McKown added.

Dr. Rhoten received a Ph.D. degree in anatomy from the Milton S. Hershey Medical Center at Pennsylvania State University, and did a fellowship in experimental pathology at Washington University in St. Louis. His research has focused on aspects of pancreatic endocrine cell structure and function, and the role of calcium-binding proteins in cells. His studies have included morphological, physiological, biochemical and molecular biological approaches.

A manuscript reviewer for several prominent scientific journals, including Science, Endocrinology, and the Anatomical Record, Dr. Rhoten has contributed to three medical textbooks in the fields of microanatomy and endocrinology. In addition, he is a reviewer for the National Science Foundation and a referee for the Natural Sciences and Engineering Research Council of Canada.

CNN films segment about Walker, rural geriatrics program

Dr. Robert Walker and Marshall's ground-breaking rural geriatrics demonstration program will be featured on a Cable News Network segment expected to air in late March.

Correspondent Larry Woods covered the story for his "Across America" segment, which shares news of novel people and activities. He and the CNN crew filmed footage at the Lincoln Primary Care Center February 5 and 6 of Dr. Walker and the program in action.

Marshall's rural geriatrics demonstration project is the first of its kind in the nation. Based at the Lincoln Primary Care Center, it provides a network of medical and support services designed to improve the quality of life of elderly people and to allow them to live independently as long as possible.

The Department of Family and Community Health was named the Outstanding Rural Health Program in America in 1988 by the National Rural Health Association. The Lincoln Primary Care Center, which is affiliated with Marshall's School of Medicine, last year received the Outstanding Rural Practice in America award from that organization.

Other Marshall rural services and educational programs have been featured on Lifetime Medical Television and the CBS program "48 Hours."

Fifth Research Day set for March 31

All West Virginia health professionals are invited to attend the Marshall University School of Medicine's Fifth Annual Research Day on March 31 at the Gateway Convention Center in Barboursville.

Students, residents and faculty members will make more than 50 presentations describing their research on laboratory and clinical topics such as gastric atrophy in the elderly, pancreatitis, and Hodgkins' disease. Dr. Simon Karpatkin, professor of medicine at New York University, will present the keynote address at the Research Day luncheon and will give a pre-Research Day lecture on Monday evening, March 30, at the Gateway.

CME credit is available and all events are free and open to the public. Registration information is available by calling 696-7019.

Martin receives new national title

Dr. Joye Martin of the Marshall University School of Medicine is among the first group of physicians to receive the title "certified medical director of a long-term care facility."

This title recognizes physicians with competence in both clinical geriatrics and medical direction, and was bestowed by the American Medical Directors Association, the professional association representing long-term care physicians. Only 135 doctors nationwide have earned the title and Dr. Martin and the other title recipients were honored at the AMDA meeting March 7.

Dr. Martin is medical director of the Skilled Nursing Unit at St. Mary's Hospital, quality assurance medical director for Pinnacle Care Center, and is chairperson of the West Virginia Nursing Home Administrators Licensing Board. In addition, she provides outpatient geriatrics services through the Hanshaw Geriatric Center.

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Medical Student News

Editor's Note: *This new page will feature articles from medical students from the West Virginia University School of Medicine (both campuses) and the Marshall University School of Medicine. If you would like to contribute an article, please contact Nancy Hill, managing editor, at 925-0342. The following messages are from three of the medical students who attended the Medical Student Section meeting at the WVSMA's Mid-Winter Clinical Conference in Huntington.*

WVU — Morgantown

Medicine has been maligned and the areas of criticism are obvious - - the precipitous rise in health care costs, increasing numbers of uninsured and underinsured patients, the malpractice environment, AIDS, the elderly, and so on. From local community groups to the president of the United States, grievances, debate and various solutions have been offered as focus intensifies on the current health care dilemma. As medical students, the time constraints and the vast amount of information to be assimiliated seems to leave little time for pondering the issues that we will confront upon graduation.

The pressures and perceptions of injustice in the current health care system have provided the impetus for change to a more accessible, affordable delivery of health care in the country. This change is inevitable and is now being felt in all areas of medicine, including medical education. Although political and economic forces threaten rapid and dramatic change, effort must be made to maintain quality.

We, as students, must make an effort to become part of the solution through involvement at any level, from knowledge of the basic issues to participation in student groups, community organizations, and the various task forces. Involvements like these must become an inextricable part of our lifestyle, for if we do not provide direction through our participation, others will make decisions for us. If we are to maintain quality, we must be responsive.

The Medical Student Section of the West Virginia State Medical Association (WVSMA-MSS) is an organization that can be effective in responding to the necessity of change and in providing leadership for the future.

Kevin Kaufman, MSII
Acting Chairman, WVSMA-MSS

WVU — Charleston

Why join the WVSMA and the AMA since you're just a medical student?

Both the WVSMA and the AMA have student sections which are an integral part of their organizations. Medical students are represented on the school, state and national levels and play an active role in both WVSMA and AMA functions.

As a West Virginia medical student, you have the opportunity to join the WVSMA for only $10 per year, and in turn, the WVSMA will pay for your AMA membership. This is a significant savings over joining the AMA directly, but what benefits do you receive for $10?

As a member of the WVSMA, you will receive a subscription to the monthly *West Virginia Medical Journal,* the bimonthly newsletter, *WESGRAM,* a special weekly publication entitled *Legislative Update* when the West Virginia Legislature is in session, and the annual *White Paper,* which provides a yearly update on the state of health care in West Virginia. In addition, you may attend the two CME meetings that the WVSMA organizes each year, free of charge.

This $10 fee also includes your AMA membership, a subscription to *JAMA* and *American Medical News,* and access to the AMA information resources. You will also have access to insurance and investment services, credit cards, car rental discounts and savings on AT & T long distance rates.

However, let's not forget one of the most important benefits of being a member of both the AMA and WVSMA - - the political voice that these organizations represent. There are dramatic changes taking place in the American health care system, both on the state and national level. It is important that you, as a future physician, have a say in these changes. As a member of the WVSMA and the AMA, you will have your voice heard. The WVSMA has representation before the state regulatory agencies and the Legislature, while the AMA has representation before Congress and the federal courts and agencies.

I hope you will call the WVSMA office today and talk to Donna Webb about becoming a member of the fast growing WVSMA-MSS. It is a $10 investment in your future that is well spent.

Dan Stickler, MSIII

Marshall University

The work of a few students and the concern of WVSMA President Dr. Constantino Y. Amores and WVSMA Vice President Dr. James Comerci, has culminated in a renewed organization of the West Virginia State Medical Association's Medical Student Section.

The purpose of the WVSMA-MSS is to encourage students to get involved with their state chapter, as well as to participate in national issues and policies addressed by the American Medical Association's Medical Student Section. This involvement is critical due to the fast pace of change in medicine and current emphasis on health care issues which will affect us when we go into practice upon graduation.

This new Medical Student News page is planned for use by all WVSMA-MSS members for messages between campuses, discussion on legislative issues, WVSMA-MSS business matters, as well as student experiences or interesting cases seen on rotations.

Let this page be your voice! Submit an article today by contacting Nancy Hill, managing editor of the *West Virginia Medical Journal,* at 925-0342.

Brian P. Magrane, MSIII

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Dominic A. Antico, M.D.
785 Stonegate Drive
Wexford, PA 15090

David R. Ayers, M.D.
7 Perry Morris Square
Milton, WV 25541

Clyde Burgess, M.D.
P.O. Box 97
Greenbank, WV 24944

Patricia Caballero, M.D.
WVU School of Medicine
Dept. of Anesthesia
Morgantown, WV 26506

Peter Chirico, M.D.
1035 3rd Avenue
Huntington, WV 25701

Jeffrey George
2828 1st Avenue, Suite 510
Huntington, WV 25702

Nick A. Ghaphery, D.O.
WVU School of Medicine
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Morgantown, WV 26506

E. Bruce Jones, M.D.
3 Stonecrest Drive
Huntington, WV 25701

Sam Krinsky, M.D.
Davis Memorial Hospital
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John Kuruvilla, M.D.
401 Division Street
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South Charleston, WV 25303

Suzanne McCallister
1400 6th Avenue
Huntington, WV 25701

Bahram Moshiri, M.D.
1033 20th Street
Huntington, WV 25703

Unyime O. Nseyo, M.D.
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Dept of Urology
Morgantown, WV 26506

WESPAC Members

We wish to thank the following individuals for their recent contributions to WESPAC:

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Obituaries

John Lee Crites, M.D.

Dr. John Lee Crites, 77, of Charleston, founder of the OB-GYN Clinic and residency program at CAMC, Memorial Division, died February 20 after a short illness. He had recently retired from his OB/GYN practice in Charleston.

A graduate of Charleston High School, Dr. Crites received his A.B. degree from Denison University in 1939, a B.S. degree from West Virginia University in 1941, and his medical degree in 1943 from Washington University in St. Louis.

Dr. Crites interned at St. Louis City Hospital and completed his residency in 1949 at St. Louis Maternity Barnes Hospital.

A member of the WVSMA since 1950, Dr. Crites also held membership in Obstetrics and Gynecology, Lambda Chi Alpha Fraternity and the Baptist Temple.

Dr. Crites served as a captain in the Army Medical Corps during World War II.

Surviving are his wife, Mary H. Crites; son, John Lee Jr. of Houston; daughters, Cherry Rice Jr. of Charleston, and Mary Elizabeth Olson of Huntington; sister, Kathryn C. Brooke and niece, Erma Brooke, both of Charleston.

Karl Kastl, M.D.

Dr. Karl Kastl, 81, of Charleston died February 3 at home.

A native of Prague, Neb., Dr. Kastl received his medical degree from the University of Nebraska College of Medicine in 1937. He interned at St. Agnes Hospital in Fon. du. Lac, Wis.; completed a pathology fellowship at the Medical College of Virginia; and did surgical residencies at Peoples Hospital, Children's Hospital and City Hospital in Akron, Ohio. Dr. Kastl also completed graduate work at the University of Pennsylvania Graduate School of Medicine in 1952.

A specialist in general surgery, Dr. Kastl served in the U.S. Army Medical Corps from 1941-46 and spent three years overseas as a captain during World War II.

A WVSMA member since 1954, Dr. Kastl was also a member of the AMA, Kanawha Medical Society, St. Anthony Catholic Church and the American Legion Post 20.

Surviving are his wife, Priscilla; son, Richard Kastl; his two daughters, Jane Peters and Mary Margaret Kessell of Charles Town; sisters, Lillian Vech of Burwell, Neb., and Rose McDonald of Grand Island, Neb.; and two grandchildren.

James B. Magee, M.D.

Dr. James B. Magee, 68, died November 30, at his home in Elkins, where he had practiced internal medicine from 1962 until his retirement in May 1991.

Dr. Magee received a B.S. degree from Harvard University in 1951 and his medical degree from the University of Virginia in 1955. He interned at Presbyterian St. Luke's Hospital in Chicago, where he also and completed a residency in internal medicine.

Dr. Magee had been a member of the WVSMA since 1963 and was a member of the Tygarts Valley Medical Society.

Surviving are his wife, Peggy; son Jonathan; daughter, Joyce VanPelt; one granddaughter; and four brothers.

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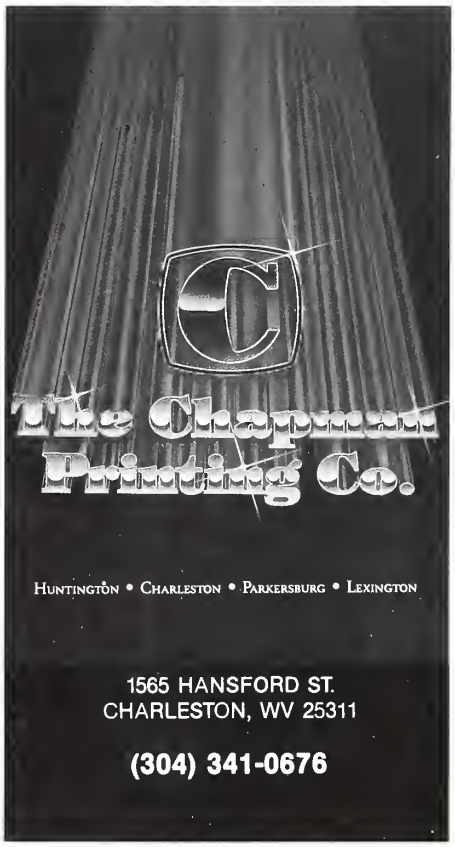

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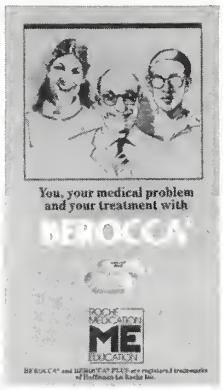

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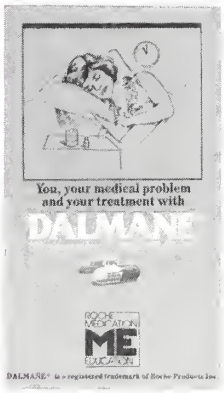

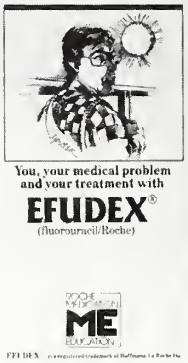

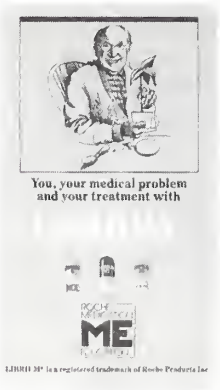

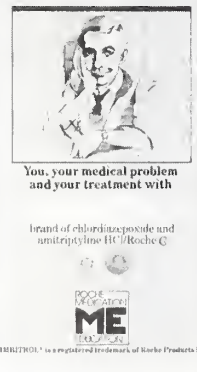

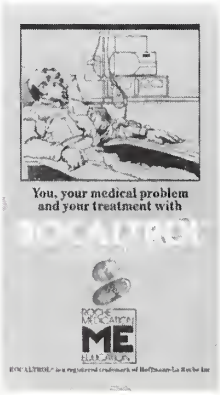

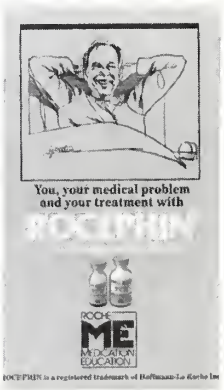

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Contraindications: Severe LV dysfunction (see *Warnings*), hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no pacemaker is present), 2nd- or 3rd-degree AV block (if no pacemaker is present), atrial flutter/fibrillation with an accessory bypass tract (eg, WPW or LGL syndromes), hypersensitivity to verapamil.

Warnings: Verapamil should be avoided in patients with severe LV dysfunction (eg, ejection fraction < 30%) or moderate to severe symptoms of cardiac failure and in patients with any degree of ventricular dysfunction if they are receiving a beta-blocker. Control milder heart failure with optimum digitalization and/or diuretics before Calan SR is used. Verapamil may occasionally produce hypotension. Elevations of liver enzymes have been reported. Several cases have been demonstrated to be produced by verapamil. Periodic monitoring of liver function in patients on verapamil is prudent. Some patients with paroxysmal and/or chronic atrial flutter/fibrillation and an accessory AV pathway (eg, WPW or LGL syndromes) have developed an increased antegrade conduction across the accessory pathway bypassing the AV node, producing a very rapid ventricular response or ventricular fibrillation after receiving I.V. verapamil (or digitalis). Because of this risk, oral verapamil is contraindicated in such patients. AV block may occur (2nd- and 3rd-degree, 0.8%). Development of marked 1st-degree block or progression to 2nd- or 3rd-degree block requires reduction in dosage or, rarely, discontinuation and institution of appropriate therapy. Sinus bradycardia, 2nd-degree AV block, sinus arrest, pulmonary edema and/or severe hypotension were seen in some critically ill patients with hypertrophic cardiomyopathy who were treated with verapamil.

Precautions: Verapamil should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdosage. Verapamil may decrease neuromuscular transmission in patients with Duchenne's muscular dystrophy and may prolong recovery from the neuromuscular blocking agent vecuronium. It may be necessary to decrease verapamil dosage in patients with attenuated neuromuscular transmission. Combined therapy with beta-adrenergic blockers and verapamil may result in additive negative effects on heart rate, atrioventricular conduction and/or cardiac contractility; there have been reports of excessive bradycardia and AV block, including complete heart block. The risks of such combined therapy may outweigh the benefits. The combination should be used only with caution and close monitoring. Decreased metoprolol and propranolol clearance may occur when either drug is administered concomitantly with verapamil. A variable effect has been seen with combined use of atenolol. Chronic verapamil treatment can increase serum digoxin levels by 50% to 75% during the first week of therapy, which can result in digitalis toxicity. In patients with hepatic cirrhosis, verapamil may reduce total body clearance and extrarenal clearance of digitoxin. The digoxin dose should be reduced when verapamil is given, and the patient carefully monitored. Verapamil will usually have an additive effect in patients receiving blood-pressure-lowering agents. Disopyramide should not be given within 48 hours before or 24 hours after verapamil administration. Concomitant use of flecainide and verapamil may have additive effects on myocardial contractility, AV conduction, and repolarization. Combined verapamil and quinidine therapy in patients with hypertrophic cardiomyopathy should be avoided, since significant hypotension may result. Concomitant use of lithium and verapamil may result in a lowering of serum lithium levels or increased sensitivity to lithium. Patients receiving both drugs must be monitored carefully. Verapamil may increase carbamazepine concentrations during combined use. Rifampin may reduce verapamil bioavailability. Phenobarbital may increase verapamil clearance. Verapamil may increase serum levels of cyclosporin. Verapamil may inhibit the clearance and increase the plasma levels of theophylline. Concomitant use of inhalation anesthetics and calcium antagonists needs careful titration to avoid excessive cardiovascular depression. Verapamil may potentiate the activity of neuromuscular blocking agents (curare-like and depolarizing); dosage reduction may be required. There was no evidence of a carcinogenic potential of verapamil administered to rats for 2 years. A study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. Pregnancy Category C. There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. Verapamil is excreted in breast milk; therefore, nursing should be discontinued during verapamil use.

Adverse Reactions: Constipation (7.3%), dizziness (3.3%), nausea (2.7%), hypotension (2.5%), headache (2.2%), edema (1.9%), CHF, pulmonary edema (1.8%), fatigue (1.7%), dyspnea (1.4%), bradycardia: HR < 50/min (1.4%), AV block: total 1°,2°,3° (1.2%), 2° and 3° (0.8%), rash (1.2%), flushing (0.6%), elevated liver enzymes, reversible non-obstructive paralytic ileus. The following reactions, reported in 1.0% or less of patients, occurred under conditions where a causal relationship is uncertain: angina pectoris, atrioventricular dissociation, chest pain, claudication, myocardial infarction, palpitations, purpura (vasculitis), syncope, diarrhea, dry mouth, gastrointestinal distress, gingival hyperplasia, ecchymosis or bruising, cerebrovascular accident, confusion, equilibrium disorders, insomnia, muscle cramps, paresthesia, psychotic symptoms, shakiness, somnolence, arthralgia and rash, exanthema, hair loss, hyperkeratosis, macules, sweating, urticaria, Stevens-Johnson syndrome, erythema multiforme, blurred vision, gynecomastia, galactorrhea/hyperprolactinemia, increased urination, spotty menstruation, impotence.

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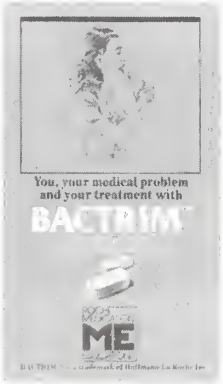

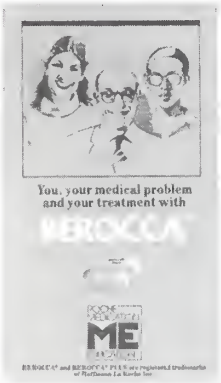

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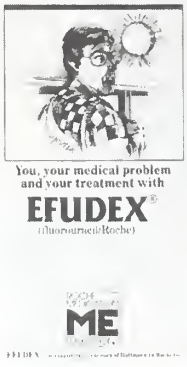

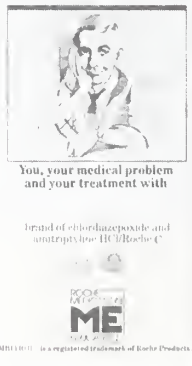

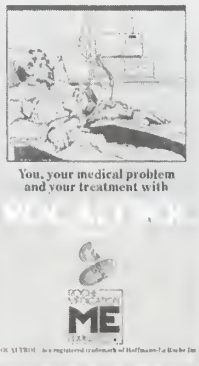

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Front Cover

A rabbit enjoys the spring weather at the Red Creek Campground at Dolly Sods in Tucker County.

OSHA rules on bloodborne pathogens

The final rule on bloodborne pathogens was released by OSHA on December 6 and physicians soon will be required to implement the regulations in stages. The standard mandates universal precautions and proper infection control procedures in the health-care setting to protect workers from potential exposure to bloodborne pathogens, especially HIV and the hepatitis B virus. The regulations apply to physicians' offices as well as hospitals, nursing homes amd other ambulatory health care facilities.

Although the standard officially took effect on March 5, it will be implemented in stages. The timetable for implementations is as follows:

May 5

Employers, including physicians' offices, must have a written exposure control plan that identifies workers whose reasonable anticipated duties may result in exposure to bloodborne pathogens and specify how such employees will be protected and trained. Infectious materials include semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids. They also include any unfixed tissue or organ other than intact skin from a human (living or dead) and HIV-containing cell or tissue cultures, organ cultures and HIV or hepatitis B — containing culture medium or other solutions as well as blood, organs or other tissue from experimental animals infected with HIV or HBV.

The plan must be accessible to employees and available to OSHA. Employers must review and update it at least annually — more often if necessary to accomodate workplace changes.

June 4

Employers must have trained all workers at risk for occupational exposure in universal precautions and provide employees with a copy of the OSHA rule. Training must include making accessible a copy of the regulatory text of the standard and explanation of its contents, general discussion on bloodborne diseases and their transmission, exposure control plan, engineering and work practice controls, personal protective equipment, hepatitis B vaccine, response to emergencies involving blood, how to handle exposure incidents, and signs/labels/color-coding.

July 6

Hepatitis B vaccinations to all employees who have occupational exposure to blood must be made within 10 working days of assignment, **at no cost to the employee,** at a reasonable time and place, under the supervision of a licensed physician or licensed health care professional. Prescreening may not be required as a condition of receiving the vaccine. Employees who choose not to be vaccinated must sign a declination from, but may later opt to receive the vaccine at no cost to the employee.

Penalties for serious violations are as high as $7,000 and willful violations can be up to $70,000.

The West Virginia State Medical Association has endorsed a plan created by Current Concept Seminars, Inc. to help physicians and health care professionals comply with these new OSHA rulings.

This plan consists of "Volume I - Infectious Control in Health Care: A Plan" and "Volume II - Infection Control in Health Care: A Training Manual." Details about purchasing these materials and an order form appears in the April 15 issue of *WESGRAM.*

A summary of OSHA's final standard on bloodborne pathogens

Purpose:

Limits occupational exposure to blood and other potentially infectious materials since any exposure could result in transmission of bloodborne pathogens which could lead to disease or death.

Scope:

Covers all employees who could be "reasonably anticipated," as the result of performing their job duties, to face contact with blood and other potentially infectious materials. OSHA has not attempted to list all occupations where exposures could occur. "Good samaritan" acts such as assisting a co-worker with a nosebleed would not be considered occupational exposure.

Infectious materials include semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid amniotic fluid, saliva in dental procedures, any body fluid visibly contaminated with blood and all any body fluids in situations where it is difficult or impossible to differentiate between body fluids. They also include any unfixed tissue or organ other than intact skin from a human (living or dead) and human immunodeficiency virus (HIV) - containing

cell or tissue cultures, organ cultures and HIV or hepatitis B (HBV) - containing culture medium or other solutions as well as blood, organs or other tissues from experimental animals infected with HIV or HBV.

Exposure Control Plan:

Requires employers to identify in writing, tasks and procedures as well as job classifications where occupational exposure to blood occurs — without regard to personal protective clothing and equipment. It must also set forth the schedule for implementing other provisions of the standard and specify the procedure for evaluating circumstances surrounding exposure incidents. The plan must be accessible to employees and available to OSHA. Employers must review and update it at least annually — more often if necessary to accommodate workplace changes.

Methods of Compliance:

Mandates universal precautions (treating body fluids/ materials as if infectious) emphasizing engineering and work practice controls. The standard stresses handwashing and requires employers to provide facilities and ensure that employees use them following exposure to blood. It sets forth procedures to minimize needlesticks, minimize splashing and spraying of blood, ensure appropriate packaging of specimens and regulated wastes and to decontaminate equipment or label it as contaminated before shipping to servicing facilities.

Employers must provide, at no cost, and require employees to use appropriate personal protective equipment such as gloves, gowns, masks, mouthpieces and resuscitation bags, and must clean, repair and replace these when necessary. Gloves are required for phlebotomy except in volunteer blood donation centers, where gloves must be made available to employees who want them.

The standard requires a written schedule for cleaning, identifying the method of decontamination to be used, in addition to cleaning following contact with blood or other potentially infectious materials. It specifies methods for disposing of contaminated sharps and sets forth standards for containers for these items and other regulated waste. Further, the standard includes provisions for handling contaminated laundry to minimize exposures.

HIV and HBV Research Laboratories and Production Facilities:

Calls for these facilities to follow standard and microbiological practices and specifies additional practices intended to minimize exposures of employees working with concentrated viruses and reduce the risk of accidental exposure for other employees at the facility. These facilities must include required containment equipment and an autoclave for decontamination of regulated waste and must be constructed to limit risks and enable easy clean up. Additional training and experience requirements apply to workers in these facilities.

Hepatitis B Vaccination:

Requires vaccinations to be made available to all employees who have occupational exposure to blood within 10 working days of assignment, at no cost, at a reasonable time and place, under the supervision of a licensed physician or licensed health care professional and according to the latest recommendations of the U.S. Public Health Service (USPHS). Prescreening may not be required as a condition of receiving the vaccine. Employees must sign a declination form if they choose not to be vaccinated, but may later opt to receive the vaccine at no cost to the employee. Should booster doses later be recommended by the USPHS, employees must be offered them.

Post-Exposure Evaluation and Follow-up:

Specifies procedures to be made available to all employees who have had an exposure incident plus any laboratory tests must be conducted by an accredited laboratory at no cost to the employee. Follow-up must include a confidential medical evaluation documenting documenting the circumstances of exposure, identifying and testing the source individual if feasible, testing the exposed employee's blood if he/she consents, post-exposure prophylaxis, counseling and evaluation of reported illnesses. Health care professionals must be provided specified information to facilitate the evaluation and their written opinion on the need for hepatitis B vaccination following the exposure. Information such as the employee's ability to receive the hepatitis B vaccine must be supplied to the employer. All diagnoses must remain confidential.

Hazard Communication:

Requires warning labels including the orange or orange-red biohazard symbol affixed to containers of regulated waste, refrigerators and freeezers and other containers which are used to store or transport blood or other potentially infectious materials. Red bags or containers may be used instead of labeling. When a facility uses universal precautions in its handling of all specimens, labeling is not required within the facility. Likewise, when all laundry is handled with universal precautions, the laundry need not be labeled. Blood which has been tested and found free of HIV and HBV and released for clinical use, and regulated waste which has been decontaminated, need not be labeled. Signs must be used to identify restricted areas in HIV and HBV research laboratories and production facilities.

Information and Training:

Mandates training within 90 days of effective date, initially upon assignment and annually — employees who have received appropriate training within the past year need only receive additional training in items not previously covered. Training must include making accessible a copy of the regulatory text of the standard and explanation of its contents, general discussion on bloodborne diseases and their transmission, exposure

control plan, engineering and work practice controls, personal protective equipment, hepatitis B vaccine, response to emergencies involving blood, how to handle exposure evaluation and follow-up program, signs/labels/color-coding. There must be opportunity for questions and answers, and the trainer must be knowledgeable in the subject matter. Laboratory and production facility workers must receive additional specialized initial training.

Recordkeeping:

Calls for medical records to be kept for each employee with occupational exposure for the duration of employment plus 30 years, must be confidential and must include name and social security number; hepatitus B vaccination status (including dates); results of any examinations, medical testing and follow-up procedures; a copy of the health care professional written opinion; and a copy of information provided to the health care professional. Training records must be maintained for three years and must include dates, contents of the training program or a summary, trainer's name and qualifications, names and job titles of all persons attending the sessions. Medical records must be made available to the subject employee, anyone with written consent of the employee, OSHA and NIOSH — they are not available to the employer. Disposal of records must be in accord with OSHA's standard covering access to records.

Dates:

Sets effective date 90 days after publication in the Federal Register. Exposure control plan must be completed within 60 days of the effective data. Information and training requirements take effect 90 days following the effective date. And the following other provisions take effect 120 days after the effective date: engineering and work practice controls, personal protective equipment, housekeeping, special provisions covering HIV and HBV research laboratories and production facilities, hepatitis B vaccination and post-exposure evaluation and follow-up and labels and signs.

Produced by Occupational Safety and Health Administration, December 1991, adapted by Epidemiology and Disease Control Program

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* See DOSAGE AND ADMINISTRATION section of prescribing information.

† If, after an adequate trial of ACCUPRIL alone, based on your medical judgment as the prescribing physician, you determine that your patient requires the addition of a diuretic, Parke-Davis will refund to the patient his/her cost for the diuretic prescription less any amount reimbursed or paid for by an HMO, insurance company, or any other plan or program.

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‡ In some patients, the antihypertensive effect may diminish toward the end of the once-daily dosing interval. In such patients, an increase in dosage or twice-daily administration may be warranted.

ACCUPRIL is available in 10, 20, and 40 mg tablets. Usual initial starting dosage is 10 mg once daily.

ACCUPRIL is contraindicated in patients who are hypersensitive to this product and in patients with a history of angioedema related to previous treatment with an ACE inhibitor.

Please see brief summary of prescribing information on following page.

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PARKE-DAVIS

Accupril® (Quinapril Hydrochloride Tablets)

Before prescribing, please see full prescribing information. A brief summary follows.

INDICATIONS AND USAGE

ACCUPRIL is indicated for the treatment of hypertension. It may be used alone or in combination with thiazide diuretics.

In using ACCUPRIL, consideration should be given to the fact that another angiotensin-converting enzyme (ACE) inhibitor, captopril, has caused agranulocytosis, particularly in patients with renal impairment or collagen vascular disease. Available data are insufficient to show that ACCUPRIL does not have a similar risk (see WARNINGS).

CONTRAINDICATIONS

ACCUPRIL is contraindicated in patients who are hypersensitive to this product and in patients with a history of angioedema related to previous treatment with an ACE inhibitor.

WARNINGS

Angioedema: Angioedema of the face, extremities, lips, tongue, glottis, and larynx has been reported in patients treated with ACE inhibitors and has been seen in 0.1% of patients receiving ACCUPRIL. Angioedema associated with laryngeal edema can be fatal. If laryngeal stridor or angioedema of the face, tongue, or glottis occurs, treatment with ACCUPRIL should be discontinued immediately, the patient treated in accordance with accepted medical care, and carefully observed until the swelling disappears. In instances where swelling is confined to the face and lips, the condition generally resolves without treatment; antihistamines may be useful in relieving symptoms.

Where there is involvement of the tongue, glottis, or larynx likely to cause airway obstruction, emergency therapy including, but not limited to, subcutaneous epinephrine solution 1:1000 (0.3 to 0.5 mL) should be promptly administered (see ADVERSE REACTIONS).

Hypotension: Symptomatic hypotension was rarely seen in uncomplicated hypertensive patients treated with ACCUPRIL but, as with other ACE inhibitors, it is a possible consequence of therapy in salt/volume depleted patients, such as those previously treated with diuretics or dietary salt restriction or who are on dialysis (see PRECAUTIONS, DRUG INTERACTIONS, and ADVERSE REACTIONS). In controlled studies, syncope was observed in 0.4% of patients (N = 3203); this incidence was similar to that observed for captopril (1%) and enalapril (0.8%).

In patients with concomitant congestive heart failure, with or without associated renal insufficiency, ACE inhibitor therapy may cause excessive hypotension, which may be associated with oliguria or azotemia and, rarely, with acute renal failure and death. In such patients, ACCUPRIL therapy should be started at the recommended dose under close medical supervision. These patients should be followed closely for the first 2 weeks of treatment and whenever the dosage of antihypertensive medication is increased (see DOSAGE AND ADMINISTRATION).

If symptomatic hypotension occurs, the patient should be placed in the supine position and, if necessary, normal saline may be administered intravenously. A transient hypotensive response is not a contraindication to further doses; however, lower doses of ACCUPRIL or reduced concomitant diuretic therapy should be considered.

Neutropenia/Agranulocytosis: Another ACE inhibitor, captopril, has been shown to cause agranulocytosis and bone marrow depression rarely in patients with uncomplicated hypertension, but more frequently in patients with renal impairment, especially if they also have a collagen vascular disease such as systemic lupus erythematosus or scleroderma. Agranulocytosis did occur during ACCUPRIL treatment in one patient with a history of neutropenia during previous captopril therapy. Available data from clinical trials of ACCUPRIL are insufficient to show that, in patients without prior reactions to other ACE inhibitors, ACCUPRIL does not cause agranulocytosis at similar rates. As with other ACE inhibitors, periodic monitoring of white blood cell counts in patients with collagen vascular disease and/or renal disease should be considered.

Fetal/Neonatal morbidity and mortality: ACE inhibitors, including ACCUPRIL, can cause fetal and neonatal morbidity and mortality when administered to pregnant women.

When ACE inhibitors have been used during the second and third trimesters of pregnancy, there have been reports of hypotension, renal failure, skull hypoplasia, and death. Oligohydramnios has also been reported, presumably resulting from decreased fetal renal function; oligohydramnios has been associated with fetal limb contractures, craniofacial deformities, hypoplastic lung development, and intrauterine growth retardation.

Prematurity and patent ductus arteriosus have been reported, although it is not clear whether these occurrences were due to the ACE-inhibitor exposure or to the mother's underlying disease. It is not known whether exposure limited to the first trimester can adversely affect fetal outcome.

A patient who becomes pregnant while taking ACE inhibitors, or who takes ACE inhibitors when already pregnant, should be apprised of the potential hazard to her fetus. If she continues to receive ACE inhibitors during the second or third trimester of pregnancy, frequent ultrasound examinations should be performed to look for oligohydramnios. When oligohydramnios is found, ACE inhibitors should generally be discontinued.

Infants with histories of in utero exposure to ACE inhibitors should be closely observed for hypotension, oliguria, and hyperkalemia. If oliguria occurs, attention should be directed toward support of blood pressure and renal perfusion. Hemodialysis and peritoneal dialysis have little effect on the elimination of quinapril and quinaprilat.

No fetotoxic or teratogenic effects were observed in rats at quinapril doses as high as 300 mg/kg/day (180 and 30 times the maximum daily human dose when based on mg/kg and mg/m^2, respectively), despite maternal toxicity at 150 mg/kg/day. Tested later in gestation and during lactation, reduced offspring body weight was seen at ≥25 mg/kg/day, and changes in renal histology (juxtaglomerular cell hypertrophy, tubular/pelvic dilation, glomerulosclerosis) were observed both in dams and offspring treated with 150 mg/kg/day. Quinapril was not teratogenic in the rabbit; however, as noted with other ACE inhibitors, maternal toxicity and embryotoxicity were seen in some rabbits at quinapril doses as low as 0.5 mg/kg/day (one time the recommended human dose) and 1.0 mg/kg/day, respectively.

PRECAUTIONS

General

Impaired renal function: As a consequence of inhibiting the renin-angiotensin-aldosterone system, changes in renal function may be anticipated in susceptible individuals. In patients with severe heart failure whose renal function may depend on the activity of the renin-angiotensin-aldosterone system, treatment with ACE inhibitors, including ACCUPRIL, may be associated with oliguria and/or progressive azotemia and rarely acute renal failure and/or death.

In clinical studies in hypertensive patients with unilateral or bilateral renal artery stenosis, increases in blood urea nitrogen and serum creatinine have been observed in some patients following ACE inhibitor therapy. These increases were almost always reversible upon discontinuation of the ACE inhibitor and/or diuretic therapy. In such patients, renal function should be monitored during the first few weeks of therapy.

Some hypertensive patients with no apparent preexisting renal vascular disease have developed increases in blood urea and serum creatinine, usually minor and transient, especially when ACCUPRIL has been given concomitantly with a diuretic. This is more likely to occur in patients with preexisting renal impairment. Dosage reduction and/or discontinuation of any diuretic and/or ACCUPRIL may be required.

Evaluation of hypertensive patients should always include assessment of renal function (see DOSAGE AND ADMINISTRATION).

Hyperkalemia and potassium-sparing diuretics: In clinical trials, hyperkalemia (serum potassium ≥5.8 mmol/L) occurred in approximately 2% of patients receiving ACCUPRIL. In most cases, elevated serum potassium levels were isolated values which resolved despite continued therapy. Less than 0.1% of patients discontinued therapy due to hyperkalemia. Risk factors for the development of hyperkalemia include renal insufficiency, diabetes mellitus, and the concomitant use of potassium-sparing diuretics, potassium supplements, and/or potassium-containing salt substitutes, which should be used cautiously, if at all, with ACCUPRIL (see PRECAUTIONS, Drug Interactions).

Surgery/anesthesia: In patients undergoing major surgery or during anesthesia with agents that produce hypotension, ACCUPRIL will block angiotensin II formation secondary to compensatory renin release. If hypotension occurs and is considered to be due to this mechanism, it can be corrected by volume expansion.

Information for Patients

Angioedema: Angioedema, including laryngeal edema, can occur with treatment with ACE inhibitors, especially following the first dose. Patients should be so advised and told to report immediately any signs or symptoms suggesting angioedema (swelling of face, extremities, eyes, lips, tongue, difficulty in swallowing or breathing) and to stop taking the drug until they have consulted with their physician (see WARNINGS).

Symptomatic hypotension: Patients should be cautioned that lightheadedness can occur, especially during the first few days of ACCUPRIL therapy, and that it should be reported to a physician. If actual syncope occurs, patients should be told to not take the drug until they have consulted with their physician (see WARNINGS).

All patients should be cautioned that inadequate fluid intake or excessive perspiration, diarrhea, or vomiting can lead to an excessive fall in blood pressure because of reduction in fluid volume, with the same consequences of lightheadedness and possible syncope.

Patients planning to undergo any surgery and/or anesthesia should be told to inform their physician that they are taking an ACE inhibitor.

Hyperkalemia: Patients should be told not to use potassium supplements or salt substitutes containing potassium without consulting their physician (see PRECAUTIONS).

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Neutropenia: Patients should be told to report promptly any indication of infection (eg, sore throat, fever) which could be a sign of neutropenia.

NOTE: As with many other drugs, certain advice to patients being treated with ACCUPRIL is warranted. This information is intended to aid in the safe and effective use of this medication. It is not a disclosure of all possible adverse or intended effects.

Drug Interactions

Concomitant diuretic therapy: As with other ACE inhibitors, patients on diuretics, especially those on recently instituted diuretic therapy, may occasionally experience an excessive reduction of blood pressure after initiation of therapy with ACCUPRIL. The possibility of hypotensive effects with ACCUPRIL may be minimized by either discontinuing the diuretic or cautiously increasing salt intake prior to initiation of treatment with ACCUPRIL. If it is not possible to discontinue the diuretic, the starting dose of quinapril should be reduced (see DOSAGE AND ADMINISTRATION).

Agents increasing serum potassium: Quinapril can attenuate potassium loss caused by thiazide diuretics and increase serum potassium when used alone. If concomitant therapy of ACCUPRIL with potassium-sparing diuretics (eg, spironolactone, triamterene, or amiloride), potassium supplements, or potassium-containing salt substitutes is indicated, they should be used with caution along with appropriate monitoring of serum potassium (see PRECAUTIONS).

Tetracycline and other drugs that interact with magnesium: Simultaneous administration of tetracycline with ACCUPRIL reduced the absorption of tetracycline by approximately 28% to 37%, possibly due to the high magnesium content in ACCUPRIL tablets. This interaction should be considered if coprescribing ACCUPRIL and tetracycline or other drugs that interact with magnesium.

Lithium: Increased serum lithium levels and symptoms of lithium toxicity have been reported in patients receiving concomitant lithium and ACE inhibitor therapy. These drugs should be co-administered with caution, and frequent monitoring of serum lithium levels is recommended. If a diuretic is also used, it may increase the risk of lithium toxicity.

Other agents: Drug interaction studies of ACCUPRIL with other agents showed:

- Multiple dose therapy with propranolol or cimetidine has no effect on the pharmacokinetics of single doses of ACCUPRIL.
- The anticoagulant effect of a single dose of warfarin (measured by prothrombin time) was not significantly changed by quinapril coadministration twice-daily.
- ACCUPRIL treatment did not affect the pharmacokinetics of digoxin.
- No pharmacokinetic interaction was observed when single doses of ACCUPRIL and hydrochlorothiazide were administered concomitantly.

Carcinogenesis, Mutagenesis, Impairment of Fertility

Quinapril hydrochloride was not carcinogenic in mice or rats when given in doses up to 75 or 100 mg/kg/day (50 to 60 times the maximum human daily dose, respectively, on a mg/kg basis and 3.8 to 10 times the maximum human daily dose when based on a mg/m^2 basis) for 104 weeks. Female rats given the highest dose level had an increased incidence of mesenteric lymph node hemangiomas and skin/subcutaneous lipomas. Neither quinapril nor quinaprilat were mutagenic in the Ames bacterial assay with or without metabolic activation. Quinapril was also negative in the following genetic toxicology studies: *in vitro* mammalian cell point mutation, sister chromatid exchange in cultured mammalian cells, micronucleus test with mice, *in vitro chromosome* aberration with V79 cultured lung cells, and in an *in vivo* cytogenetic study with rat bone marrow. There were no adverse effects on fertility or reproduction in rats at doses up to 100 mg/kg/day (60 and 10 times the maximum daily human dose when based on mg/kg and mg/m^2, respectively).

Pregnancy

Pregnancy Category D: See WARNINGS, Fetal/Neonatal morbidity and mortality.

Nursing Mothers

It is not known if quinapril or its metabolites are secreted in human milk. Quinapril is secreted to a limited extent, however, in milk of lactating rats (5% or less of the plasma drug concentration was found in rat milk). Because many drugs are secreted in human milk, caution should be exercised when ACCUPRIL is given to a nursing mother.

Geriatric Use

Elderly patients exhibited increased area under the plasma concentration time curve (AUC) and peak levels for quinaprilat compared to values observed in younger patients; this appeared to relate to decreased renal function rather than to age itself. In controlled and uncontrolled studies of ACCUPRIL where 918 (21%) patients were 65 years and older, no overall differences in effectiveness or safety were observed between older and younger patients. However, greater sensitivity of some older individual patients cannot be ruled out.

Pediatric Use

The safety and effectiveness of ACCUPRIL in children have not been established.

ADVERSE REACTIONS

ACCUPRIL has been evaluated for safety in 4960 subjects and patients. Of these, 3203 patients, including 655 elderly patients, participated in controlled clinical trials. ACCUPRIL has been evaluated for long-term safety in over 1400 patients treated for 1 year or more.

Adverse experiences were usually mild and transient.

Discontinuation of therapy because of adverse events was required in 4.7% of patients treated with ACCUPRIL in placebo-controlled hypertension trials.

Adverse experiences probably or possibly related to therapy or of unknown relationship to therapy occurring in 1% or more of the 1563 patients in placebo-controlled hypertension trials who were treated with ACCUPRIL are shown below.

Adverse Events in Placebo-Controlled Trials

	ACCUPRIL (N = 1563) Incidence (Discontinuance)	Placebo (N = 579) Incidence (Discontinuance)
Headache	5.6 (0.7)	10.9 (0.7)
Dizziness	3.9 (0.8)	2.6 (0.2)
Fatigue	2.6 (0.3)	1.0
Coughing	2.0 (0.5)	0.0
Nausea/Vomiting	1.4 (0.3)	1.9 (0.2)
Abdominal Pain	1.0 (0.2)	0.7

Clinical adverse experiences probably or possibly related, or of uncertain relationship to therapy, occurring in 0.5% to 1.0% (except as noted) of the patients treated with ACCUPRIL (with or without concomitant diuretic) in controlled or uncontrolled trials (N = 4397) and less frequent, clinically significant events seen in clinical trials or post-marketing experience (the rarer events are in italics) include (listed by body system):

General: back pain, malaise

Cardiovascular: palpitation, vasodilation, tachycardia, *heart failure, hyperkalemia, myocardial infarction, cerebrovascular accident, hypertensive crisis, angina pectoris, orthostatic hypotension, cardiac rhythm disturbances*

Gastrointestinal: dry mouth or throat, constipation, *gastrointestinal hemorrhage, pancreatitis, abnormal liver function tests*

Nervous/Psychiatric: somnolence, vertigo, syncope, *nervousness, depression*

Integumentary: increased sweating, pruritus, *exfoliative dermatitis, photosensitivity reaction*

Urogenital: *acute renal failure*

Other: amblyopia, pharyngitis, sinusitis, bronchitis, *agranulocytosis, thrombocytopenia*

Angioedema: angioedema has been reported in patients receiving ACCUPRIL (0.1%). Angioedema associated with laryngeal edema may be fatal. If angioedema of the face, extremities, lips, tongue, glottis, and/or larynx occurs, treatment with ACCUPRIL should be discontinued and appropriate therapy instituted immediately. (See WARNINGS.)

Clinical Laboratory Test Findings

Hematology: (See WARNINGS)

Hyperkalemia: (See PRECAUTIONS)

Creatinine and blood urea nitrogen: Increases (>1.25 times the upper limit of normal) in serum creatinine and blood urea nitrogen were observed in 2% and 2%, respectively, of patients treated with ACCUPRIL alone. Increases are more likely to occur in patients receiving concomitant diuretic therapy than in those on ACCUPRIL alone. These increases often remit on continued therapy.

* In some patients, the antihypertensive effect may diminish toward the end of the once-daily dosing interval. In such patients, an increase in dosage or twice-daily administration may be warranted.

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The supply of mammography resources in West Virginia

DAVID R. ARTZ, MSII
West Virginia University School of Medicine, Morgantown
MARTIN L. BROWN, Ph.D.
Applied Research Branch of the Surveillance Program, National Cancer Institute, the National Institutes of Health, Bethesda, Md.
MICHAEL J. BARRETT
Information Management Services, Inc., Silver Spring, Md.

Abstract

The distribution of mammography machines and related resources in West Virginia, along with the distribution of breast cancer screen-eligible women, are examined using county-specific data. This data placed on a state map shows that it is not necessary to cross more than one county line anywhere within West Virginia in order to visit a mammography facility. The overall density of these machines is 20 per 100,000 women over 45, almost double the capacity needed for screening mammography.

After taking into account the projected demand for mammography, the current average cost per exam is around $65 - $100. If mammography machines were placed in all the counties without machines, the cost in those counties would be around $140 per exam. It would be cheaper to provide a travel allowance to women in rural counties than to install machines in these areas.

Machines that are accredited by the American College of Radiologists, the most available indicator of quality mammography, are located only in densely populated areas of the state.

Introduction

The causes of breast cancer are not definitively known. As a result, efforts to reduce breast cancer mortality have focused on the early detection of the disease so that it can be treated in its most curable stage. Screening mammography, combined with clinical breast examination, is widely considered to be an effective method of early detection for breast cancer screening. A number of randomized clinical trial studies, case control studies and demonstration studies have shown that breast cancer screening programs, which include mammography, can result in reduced mortality from breast cancer (1).

Acceptance of screening mammography by primary care physicians and utilization of mammography services by women increased markedly in the past five years (2,3). Since January 1, 1991, bi-annual screening mammography has been covered for women over the age of 64 by Medicare. Medicare reimburses up to 80 percent of $55 for the service (4). In a recent paper, Brown and colleagues (5) have shown that, for the United States as a whole, there is a surplus of mammographic equipment compared to current and projected use. As a result, the average cost of mammographic services may be considerably higher than it would be if these resources were more efficiently allocated. However, the question of geographical distribution of the mammography resources, especially in a predominantly rural state such as West Virginia, was not considered.

This paper uses more recent and complete data to examine the amount and distribution of medical resources related to mammography in West Virginia in order to decide if this allocation of resources is consistent with statewide access to high quality and reasonably priced screening mammography services.

Data sources

The number and location of mammography units was obtained from computerized records of the Food and Drug Administration (FDA). The data, which is based on forms which must be filed with the FDA whenever radiological equipment is installed, includes all dedicated mammography X-ray machines installed between January 1974 and June 1990 (5). The number and location of female diagnostic radiologic technologists was based on a listing of registered technologists in good standing as of January 1990, supplied by the American Registry of Radiologic Technologists (ARRT). The number and location of mammography facilities certified by the American College of Radiology (ACR) was based on information from the ACR as of August 1991. In addition, the population of women age 45 and over was derived from the 1990 Census of the United States.

Methods

The appropriate allocation of mammography equipment for screening mammography depends on the eligible population and the intensity of use of the equipment. There are a variety of recommendations regarding the former. The working guidelines of the National Cancer Institute recommend annual or bi-annual

mammography for women between the ages of 40 and 49 and annual mammography for women over the age of 49. Other clinical guidelines are less inclusive and aggressive, ranging from (annual) mammography for women over the age of 49 to bi-annual mammography for women between the ages of 50 and 75 (5). For illustrative purposes, we utilized the most generous definition of the eligible population. From a numerical standpoint, the eligible population covered by the NCI guidelines is approximately equivalent to all women age 45 and older obtaining a mammogram annually, so we took this as the eligible population. The most recent national survey indicates that in 1990 about 31 percent of all women interviewed were in compliance with the NCI guidelines (3). Given the increasing trend in mammography usage in recent years, we assumed a 40 percent compliance rate to be effective for the first half of the 1990s. Thus, the eligible population was taken as 40 percent of women age 45 and over.

How many of these women can be served by a facility equipped with a single mammography machine? In principle, such a facility can screen 40 or more women per day, although very few facilities in the United States operate at this level. We adopted, as our standard, a more realistic level of operation which still results in a reasonable level of economic efficiency. In order to achieve a level of cost comparable to the price allowed by Medicare, $55 to $68 in 1991, a reasonably well organized facility must perform at least 15 screening examinations per day (5). At this level of operation, and assuming an operation schedule of 240 days per year, a single facility (with one machine) can screen 3,600 women per year. With a compliance rate of 40 percent, this facility can serve a population which has 9,000 women over the age of 44. Another way of stating this result is that one machine is needed for every 9,000 women over the age of 44, or 11 machines are needed per 100,000 women over the age of 44, for screening mammography. We

TABLE 1

County	Number of Mammography Units	Number of Women 45 and Over	Number of Full-Time Radiologic Technologists
Barbour	0	3114	0
Berkeley	1	9763	7
Boone	0	4584	6
Braxton	0	2620	4
Brooke	0	5804	9
Cabell	4	20644	45
Calhoun	1	1512	1
Clay	0	1666	0
Doddridge	0	1341	0
Fayette	0	10156	10
Gilmer	0	1474	0
Grant	0	1972	4
Greenbrier	2	7477	7
Hampshire	1	3007	3
Hancock	3	7580	15
Hardy	0	2130	1
Harrison	5	15110	39
Jackson	0	5102	5
Jefferson	1	5759	8
Kanawha	11	43795	134
Lewis	2	3617	13
Lincoln	0	3693	1
Logan	2	7648	5
Marion	3	12846	25
Marshall	2	7497	22
Mason	1	4919	6
McDowell	0	6761	6
Mercer	5	13867	48
Mineral	1	5208	4
Mingo	2	5223	7
Monongalia	3	11336	40
Monroe	1	2616	4
Morgan	0	2626	3
Nicholas	1	4924	3
Ohio	4	11711	30
Pendleton	0	1625	1
Pleasants	0	1463	2
Pocahontas	0	1929	1
Preston	1	5310	7
Putnam	1	7160	25
Raleigh	5	15588	37
Randolph	1	5411	7
Ritchie	0	2075	0
Roane	0	2969	3
Summers	0	3138	2
Taylor	1	3100	4
Tucker	0	1628	0
Tyler	1	1952	1
Upshur	1	4158	4
Wayne	1	8024	8
Webster	0	2010	0
Wetzel	2	3893	4
Wirt	0	968	3
Wood	1	17662	57
Wyoming	0	4859	4

estimate that an additional margin of 25 percent of machines may be required for other mammography procedures (5), bringing the total required "density" to 14 machines per 100,000 women over the age of 44.

State level results

According to the 1990 Census, 354,024 women age 45 and over reside in West Virginia. The FDA data indicates that 71 dedicated mammography machines have been installed in the state. Thus, the density of mammography machines in the state is 20 per 100,000; almost double the capacity needed for screening mammography in the 1990s.

This result is a double-edged sword. On the one hand, it is reassuring that more than adequate capacity now exists for use projected over the next few years. On the other hand, at the level of demand projected for the 1990s, this level of capacity indicates that the average facility will be operating at less than 15 examinations per day, probably 6 - 10 per day and, therefore, at a cost per examination in the $65 - $100 range. In 1988, actual charges (not costs) for mammography in West Virginia ranged from $50 to over $200 and a plurality of facilities charged $90 - $109. The actual level of excess capacity is higher than estimated here because only dedicated units were taken into account. While it is not considered good practice, mammography was being conducted in 1988 with at least three non-dedicated units. Reported utilization levels ranged from less than 100 to more than 5,000 examinations per year (6). The average level of utilization for both diagnostic and screening mammography was 6.8 examinations per day, assuming a 240 day per year operating schedule.

County level results

In the second column of Table 1, the number of mammography machines is shown by county. The distribution is very uneven since 34 machines are located in just 6 counties; the remaining 49 counties contain just 37 machines and 24 counties contain no machine. However, we were able to prove that, this distributional pattern is not necessarily adverse.

In the third column of Table 1, the population of women over the age of 44 by county is listed. With one exception (Fayette County), every county without a mammography machine has fewer, in most cases far fewer, than 9,000 eligible women, the minimum population which would allow a facility to achieve a modestly efficient level of operation. In general, these counties also lack the complementary resources needed for mammography. For example, as shown in the fourth column of Table 1, almost half of these counties have only one or no registered female radiologic technologists. In order to be eligible for Medicare coverage of screening mammography, the examination must be performed by a radiologic technologist with specific experience and training in screenig mammography.

Figure 1 shows the density of mammography equipment. Virtually every county with <u>any</u> machines has an adequate or more than adequate density. Wood County appears to be in short supply, with 5.7 machines per 100,00 eligible women, but this apparent shortage is made up by a surplus of mammography machines in adjacent Washington County, Ohio. Furthermore, virtually every county with no machines is adjacent to one that is oversupplied. Therefore, no woman in the state of West Virginia needs to cross more than one county line in order to find a mammography facility with excess capacity.

Population vs. travel costs

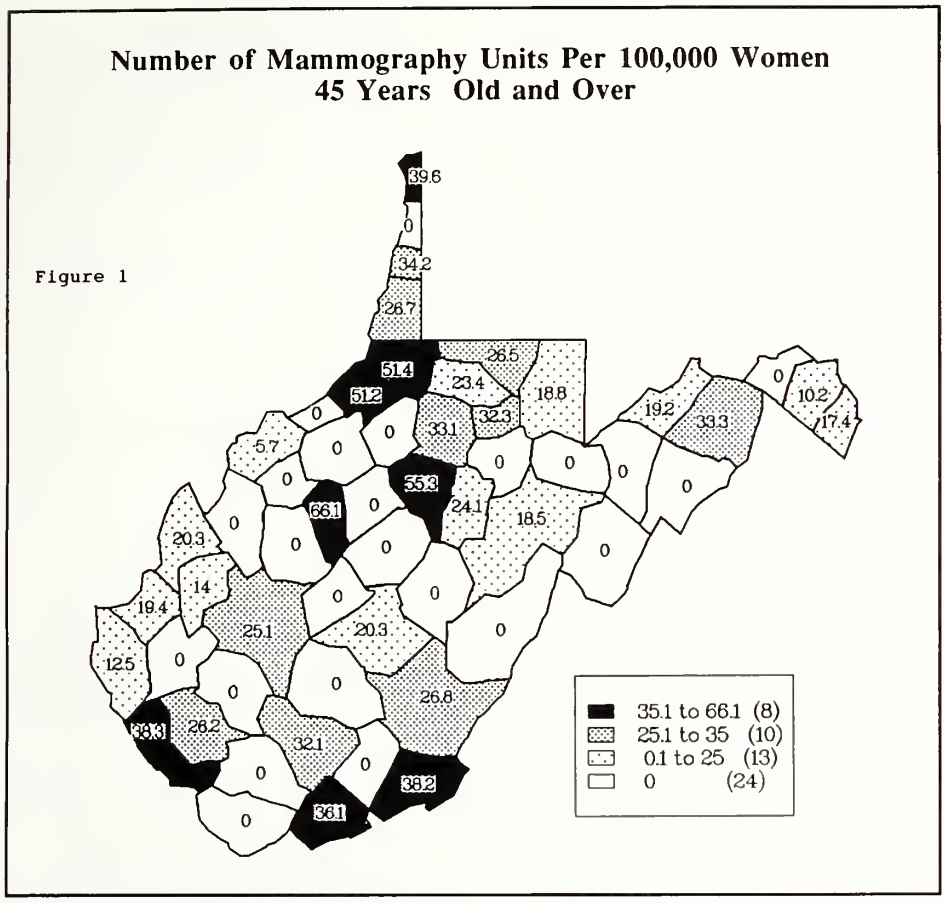
Since screening mammography is a once a year event at most, travel across a single county line does not seem to be an insurmountable barrier to compliance. It may be important, though, to inform women and their primary care physicians in sparsely populated rural counties of the location and availability of mammography services in adjacent counties.

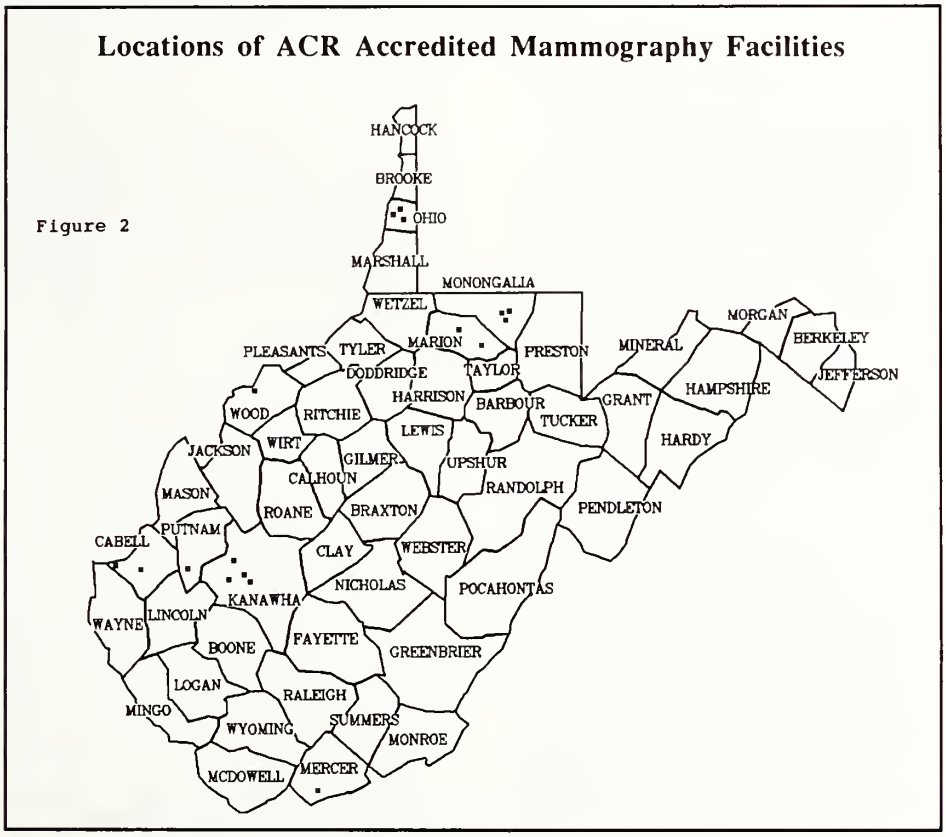
The average eligible population in all counties which currently have no machines (with the exception of Fayette County which could efficiently support one machine) is 2,380 women. The average utilization of equipment in these counties, if they were each equipped with one machine, would be less than four mammographic examinations per day. At this level of utilization, cost is about $140 per examination and the price charged would likely be higher. If these were newly installed machines, rather than relocations, overall efficiency at the statewide level would also suffer somewhat.

Thus, from a social viewpoint, it would be much cheaper to provide women living in counties which lack mammography equipment with a $25 travel subsidy in order to receive mammography examinations in an adjacent county, than it would be to install mammography machines in these counties. A travel allowance of this sort might also serve to increase compliance of populations who tend to be low users of mammography for a variety of reasons. For example, in a related context, Marcus and colleagues found that providing bus tokens to low-income women increased their adherence markedly in following up abnormal pap smears, <u>whether or not bus tokens were actually used</u> (7).

Indeed, this same principle applies to a number of counties that currently do have at least one mammography machine, but very low populations of eligible women. The provision of radiologic technologists in the counties which currently lack mammography equipment would also have to be addressed if facilities were to be located in these counties.

Another possible approach would be to serve the sparsely populated counties using mobile mammography facilities. Such facilities would be economically efficient from a social viewpoint if they operated at a cost no greater than that of more centrally located fixed sites, <u>plus</u> the travel cost





incurred when women travel to such central locations for screening from remote areas (8).

ACR accreditation

Figure 2 shows the locations of mammography facilities in West Virginia that have received accreditation from the American College of Radiology as of August 1991. While ACR accreditation is voluntary, it is considered to be a good indication of high quality mammography. (Referring physicians and patients who wish to obtain names of ACR accredited mammography facilities in their immediate vicinities can obtain this information by calling NCI's Cancer Information Service at 1-800-4-CANCER.)

Virtually all the accredited facilities are located in areas of relatively high population density, although there are also areas with fairly high populations and no accredited machines. This absence is most evident in Harrison and Raleigh Counties. The three counties with the most accredited machines are Kanawha, Ohio, and Monongalia; all of which contain teaching medical centers affiliated with one of the state's medical schools. The academic environment in these areas may be conducive to a higher standard of mammography.

There are just 4.8 accredited machines for every 100,000 women age 45 and over in West Virginia, and these machines are located in only seven different counties. Thus, while West Virginia appears to be oversupplied with mammography resources generally, it is currently undersupplied with resources that have obtained ACR accreditation. Since the ACR accredited mammography machines are particularly centralized, it could take a significant amount of travel time for women in some areas, especially in the eastern part of the state, to reach an accredited facility. We suggest that some mechanism could be established to ensure a high level of quality at screening centers throughout the state. For example, a number of states now require that all mammography facilities operating

in their states meet quality standards that are comparable to ACR accreditation (9).

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Critical incident stress in prehospital emergency care

JOHN C. LINTON, Ph.D., NREMT
Department of Behavioral Medicine and Psychiatry, WVU Health Sciences Center/CAMC, Charleston

CLIFFORD H. WEBB, NREMTP
Emergency Medical Command, Cabell Huntington Hospital, Huntington

MARTIN J. KOMMOR, M.D.
Department of Behavioral Medicine and Psychiatry, WVU Health Sciences Center/CAMC, Charleston

Abstract

In addition to the routine pressures associated with their demanding roles, prehospital emergency responders can suffer severe stress as a result of exposure to a critical incident. Such an event overwhelms the individual's ability to emotionally adjust, and can lead to symptoms which cause suffering in emergency personnel, their families and their patients.

A Critical Incident Stress Management (CISM) Team has been established in southern West Virginia to address this occupational hazard. This group was formed as a cooperative arrangement between the Charleston Division of the West Virginia University Health Sciences Center and emergency personnel in the Greater Kanawha Valley. This article offers an explanation of the team's functioning and specific information regarding its activation.

Introduction

The average American will need prehospital emergency care at least twice in a lifetime. The current health care system forces those living in the four fifths of the country classified as rural (including most of West Virginia) to face special problems in receiving emergency care, including shortages of equipment and trained personnel, and rural hospital closures which increase the time required to transport patients by ambulance for long distances to medical facilities (1).

Since evidence indicates that in emergencies such as respiratory and cardiac arrest, skilled prehospital intervention is the most critical element of care (2), both paid and volunteer prehospital care professionals play a vital role in health care provision in all settings, but particularly in rural areas.

Prehospital medical emergency workers include first responders, EMTs, paramedics, firefighters and law enforcement officers at times. Often firefighters have emergency medical training, and in many volunteer fire departments, the same individual might be cross-trained to function in an ambulance, as well as on rescue or fire equipment. Paid professionals usually work assigned 12 or 24-hour shifts, while volunteer professionals may have assigned shifts but also be on call at all times. Many paid professionals are also members of volunteer organizations on their own time.

The EMS professional often maintains a high rate of physiological arousal, either when responding to a call or on duty anticipating one. Prehospital care is often rendered under adverse conditions such as bad weather, darkness, and challenging terrain. Prediction and control of other negative factors are difficult as well (3,4,5,6,7).

The preparation of EMS professionals also varies widely. Some are mature, have extensive schooling and a good deal of supervised experience before functioning in the field. Others are teenage volunteer firefighters who are pressed into service at traumas with little preparation for what they will encounter.

The stress of providing prehospital emergency services can thus be both chronic due to constant arousal, and acute when a worker must suddenly confront grisly scenes of broken bodies and devastated lives. Both stressors are seen as causing higher than average rates of substance abuse (8,9), divorce (10) and loss through attrition (11) in EMS and firefighting personnel.

While public safety workers are affected by routine job stress, of particular concern is the stress brought about by what has been termed a critical incident. This is a very powerful event which causes an unusually powerful stress reaction, overwhelming the worker's ability to emotionally adapt to it. Examples are major disasters, such as the death or suicide of a co-worker, contact with dead or seriously injured children, or personal threat from a violent person.

Some critical incidents result when the event has personal meaning

to the responder. Emergency workers can respond to a trauma call where the victim is a friend or relative; in rural areas rescue crews often have previous social relationships with many of their patients. Even if the victim is not known, he or she could strongly resemble someone in the EMS worker's life. For example, when the parent of a five-year-old responds to a gravely injured child with the same first name and a strong likeness to his or her youngster. EMS personnel can respond to many calls without experiencing a critical incident, and while a whole team of responders may be confronted by the same traumatic stimuli, only one might experience critical incident stress symptoms.

Specific emotional reactions to critical incidents are unique in each person experiencing them, but they often include uncontrolled weeping, panic, emotional numbing with a blank stare, and an inability to perform assigned tasks. Hours, days or weeks after the incident, the worker might experience vivid recollections of the event, nightmares, sudden mood changes and estrangement from family and friends, and decreased ability to function at work. Some EMS personnel leave the field after such an incident. Less frequent serious reactions include heavy use of drugs or alcohol, severe depression and preoccupation with death, and symptoms of post-traumatic stress disorder. All such suffering affects EMS providers, their families and patients, and further erodes the number of available prehospital care personnel.

Programs have developed to address such stress responses in the military and police departments, in disaster workers and staffs of large urban emergency departments (12). A recent trend is to focus upon the emotional needs of prehospital emergency care providers by use of Critical Incident Stress Management (CISM) teams (13). CISM teams represent an alliance between EMS personnel who have been carefully selected and trained as peer counselors, and mental health professionals specifically schooled in the culture and needs of emergency workers.

In 1990, a CISM team was formed in the Greater Kanawha Valley serving Charleston and southern West Virginia. The Department of Behavioral Medicine and Psychiatry at the Charleston Division of the West Virginia Health Sciences Center agreed to be the lead agency, recruiting departmental faculty and residents to be trained in the CISM model. A small group of interested EMS providers recruited paramedics, EMTs, firefighters, nurses, emergency medical communicators and law enforcement officers. Participants from both the mental health and peer counselor groups underwent extensive CISM training using nationally recognized trainers (14). Mental health professionals also rode shifts with medic units and in some cases, cross-trained in emergency services. The Greater Kanawha Valley CISM Team now has a solid core of trained and seasoned members who perform the following services without charge:

(1) Educational programs - These inservice presentations include lectures and workshops to paramedic and EMT classes, fire schools and public safety conferences, which alert participants to critical incident stress symptoms.

(2) On scene services - These activities are provided during major events in the form of consultation to command staff regarding ways to minimize stress in personnel.

(3) Defusings - These are brief group meetings provided for crews immediately after a potentially critical incident to allow for ventilation and normalization of feelings and establishment of an emotional support system, so crew members can help one another, and thereby "defuse" the potential for a more serious emotional reaction.

(4) Debriefings - These are more formal and extensive defusings, which follow a strict protocol and are offered several days after an event that has clearly caused substantial emotional distress among some emergency responders.

All of these services are offered by teams comprised of both mental health professionals and peer counselors. They are provided only in response to a direct request by an individual clearly authorized to represent the group of responders involved. The CISM Team is activated for on scene support, defusings and debriefings through the team coordinators. Emergency communications centers in Charleston (1-800-436-9111) and Huntington (1-800-654-5767) receive initial requests for CISM Team response, and relay the necessary information to the coordinators for followup.

Conclusion

In the year since its formation, the CISM Team has been active in both defusings and debriefings, and presented a number of workshops on critical incident stress. Those served have included field responders and occasional emergency department personnel, at times in the same debriefing after they experienced both ends of a critical incident.

The CISM Team is a good example of sincere cooperation between West Virginia University and the community to confront a significant health delivery problem. Hopefully, more EMS personnel and emergency department staffs in West Virginia will avail themselves of such services to confront this occupational hazard.

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Medical Grand Rounds

West Virginia University Health Sciences Center

Edited by Irma H. Ullrich, M.D., Professor of Medicine, Section of Endocrinology/Metabolism

A patient with eosinophilia, hypoalbuminemia and abdominal pain

Discussants:

DONALD G. SEIBERT, M.D.
Assistant Professor of Medicine, Section of Gastroenterology

JAMES M. SHELLEY JR., M.D.
Director of Pathology and Clinical Laboratory Medicine, Monongalia General Hospital, and Clinical Assistant Professor of Pathology, West Virginia University

Abstract

Strongyloides stercoralis infections frequently present with eosinophilia and abdominal pain. Since the gastrointestinal symptoms are non-specific, only 15 percent of these patients are correctly considered to have an infectious enteritis or intestinal parasite. In fact, the initial diagnosis is peptic ulcer disease in most patients. The clinical course may be indolent, or patients may develop a sudden catastrophic illness, particularly following the administration of corticosteroids.

Introduction

The combination of eosinophilia and abdominal pain has a large differential diagnosis in which the majority of the intestinal nematodes (e. g. Strongyloides stercoralis), the non-intestinal nematode trichinella, the liver flukes and the protozoan isospora belli are included. Non-infectious etiologies include eosinophilic gastroenteritis, polyarteritis nodosum, inflammatory bowel disease, lymphatic malignancy, and Whipple's Disease (1). There should be particular concern when making the diagnosis of eosinophilic gastroenteritis or Crohn's disease, since these entities most easily mimic Strongyloidiasis and since the treatment of these two entities frequently involves the use of long-term corticosteroids, which may activate an asymptomatic Strongyloides infection or convert a carrier state into the hyperinfectivity syndrome.

Case report

A 75-year old white male was hospitalized with asthma in May 1990. Five percent eosinophils were noted on his peripheral smear and he was treated with penicillin and prednisone. In July, he was admitted with epigastric abdominal discomfort and the peripheral smear now had 10 percent eosinophils and the serum albumin was 2.3 mg/dl. Urine culture grew greater than 100,000 enterococci. He had a negative ultrasound of the gallbladder and an upper GI series that demonstrated a duodenal ulcer. He was started on Carafate®, Zantac®, and Bactrim®. Two weeks later, he was readmitted with increasing abdominal pain, fullness and post-prandial vomiting. He also complained of intermittent loose stools and incontinence. There were no chills or fever.

His past medical history was significant for chronic obstructive pulmonary disease, angina pectoris, and peptic ulcer disease. The patient had spent several months of the last year at a fishing camp in Maine, but had not traveled out of the country.

The physicial exam confirmed mild epigastric tenderness, but was otherwise normal. His white blood cell count was 11,000 with 12 percent eosinophils; albumin was

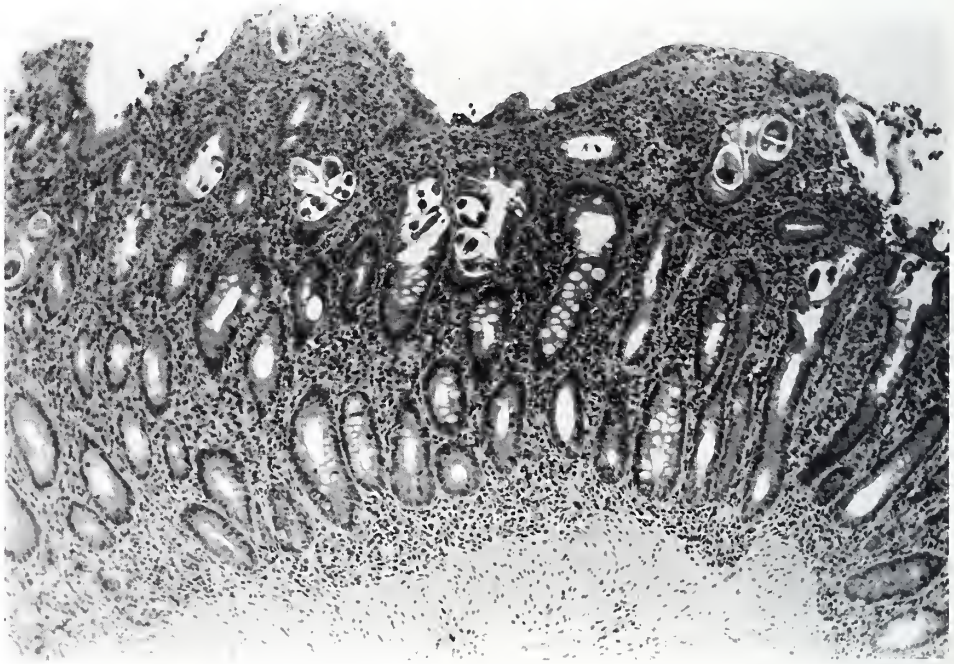


Figure 1. Low power view (100X). There is marked villous atrophy within the small intestinal mucosa. Numerous female Strongyloides are observed within glandular lumina. A dense interstitial mucosal inflammatory infiltrate is also observed.

2.3 gm/dl, but was observed to drop in the hospital to 1.3 gm/dl; and his sedimentation rate was 44 mm/hr.

An upper GI series and small bowel follow through demonstrated antral gastritis and fluid in the small bowel with distended small bowel loops. Stool for ova and parasites demonstrated a few blastocystis hominis. Fifty-three mg. of protein were noted in a 24-hour urine collection. Upper endoscopy showed diffusely erythematous gastric and duodenal mucosa with duodenal erosions. Mucosal biopsies of the third portion of the duodenum demonstrated a prominent inflammatory cellular mucosal infiltrate, as well as the rhabitiform larvae and eggs of Strongyloides stercoralis (Figure 1).

The patient was treated with 1.5 grams of thiabendazole twice a day for two days with rapid resolution of his abdominal symptoms. His albumin rose to 2.7 gm/dl within one week of therapy. Follow-up stool specimens failed to demonstrate any larvae or eggs of Strongyloides. Blastocystis hominis was also not seen.

Life cycle

Strongyloides stercoralis, also called dwarf thread worm and Miners' disease, is found throughout the tropical and subtropical regions of the world. In many regions, carriage rates may approach 30 percent - 60 percent. In the southeastern United States, carriage ranges between 0.4 percent and 4 percent (2,3,4).

Strongyloides has a complex life cycle (Figure 2) (5). Filiform larvae initiate the infection by penetrating the skin and entering the venous system. These larvae migrate to the lung where they mature and migrate up to the epiglottis where they are swallowed. In the small intestine, the male larvae are passed in the stool while the female larvae are parthogenetic and penetrate into the mucosa releasing eggs. These eggs mature into rhabitiform larvae and convert into filiform larvae when they are passed with stool. Some of the filiform larvae will pass through the mucosa of the intestine to reach the venous system and perpetuate the life cycle (endo-auto-infection); and others invade the perianal skin (exo-auto-infection). Exo-auto-infection in particular has permitted documented carriage for several decades. Strongyloides additionally survive as free living worms in warm soil. This permits genetic mixing, increased titers of the organism, and the usual source for initial infection by filiform larvae.

Clinical presentation

In 70 percent - 80 percent of patients, the presenting symptom is abdominal pain. There may be either diarrhea or constipation. Weight loss and vomiting occur less frequently. Urticaria may be noted when filiform larvae penetrate the skin (6) and because of pulmonic irritation there can also be symptoms of cough and asthma. Laboratory findings include an occasional leukocytosis, a mild to moderate eosinophilia, and hypoalbuminemia in the majority of patients (3,4).

Diagnosis

The diagnosis is usually made on the basis of rhabitiform and occasional filiform larvae seen in a freshly collected stool specimen. With severe diarrhea, the eggs may also be identified. The diagnostic yield may be improved with multiple specimens, purged stools, and stool concentration techniques. In one series, the diagnosis could only be made by stool microscopy in 80 percent of patients despite an average of 9.5 specimens analyzed per patient (3).

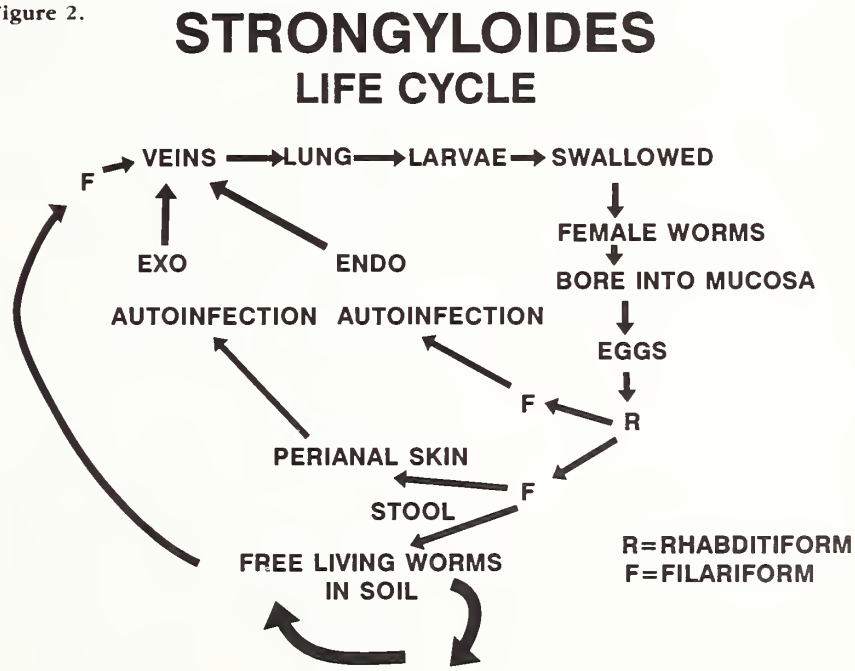
In the same series, 65 of 71 duodenal aspirates were positive for larvae. The two tests were complimentary and patients who had negative aspirates had at least one positive stool specimen. With serious infections, Strongyloides can be found in sputum and urine. Biopsies of the duodenal mucosa and gastric mucosa show an inflammatory infiltrate with duodenitis and gastritis. The cellular infiltrate may have a number of eosinophils and the villi of the small intestine may also appear fused and atrophic suggesting an eosinophilic enteritis rather than an infection associated enteritis. Less frequently, as with this case, the larvae and eggs may be identified in the tissue specimen (7,8,9).

Hypoalbuminemia

Malabsorption may help explain the diarrhea and hypoalbuminemia, but 24 of 25 patients reported by Kotcher in 1966 (7) had normal 72-hour fecal fats.

D-xylose absorption studies were obtained in five patients and were

Figure 2.



normal in four. The D-xylose absorption may have been a false negative, because a 1 gram D-xylose test dose was given rather than the usual 25 gram test dose. The smaller dose could more easily have resulted in a normal value if there was a sufficient amount of uninvolved small bowel. The 72-hour fecal fat may also have been a false negative because patients with Strongyloides and gastrointestinal distress are not likely to ingest a sufficient fat load to permit the accurate measurement of steatorrhea.

In the patient presented, it is presumed that a significant component of his hypoalbuminemia was secondary to a protein-losing enteropathy rather than malabsorption, since the albumin levels continued to drop in the setting of peripheral alimentation and with a similar caloric intake the serum albumin rose after treatment. The easiest screening test to document a protein-losing enteropathy would be a stool alpha 1 anti-trypsin screen to determine if any of this protein has spilled across the mucosa into the gut lumen (10).

Testing for protein loss by measurement of a decay curve with radiolabelled albumin or chromium chloride (11) is technically much more difficult and relatively inaccurate.

Radiologic findings

The radiologic features seen with Strongyloides include thickened duodenal folds, localized nodular defects, and duodenal ulceration. The occasional narrowed lumen in the duodenum as well as the ileum can be somewhat suggestive of Crohn's Disease. Small intestinal dilatation with the presence of fluid and barium flocculation was also seen in the patient presented. If there is a significant inflammatory process surrounding the ampulla, retraction of this area, and a resultant incompetent ampullary sphincter may result in reflux of barium into the biliary tree (4,12).

The endoscopic appearance similarly can demonstrate enlarged gastric and duodenal folds with erythema, edema and mucosal friability (9). Gastric and duodenal ulcerations may be present. It is not certain that these ulcerations are directly secondary to the Strongyloides, particularly since biopsies from most of the ulcerations have failed to reveal any larvae or eggs in the base of the ulcer. The organism, however, may initiate the initial mucosal disruption which may then extend to form a macroscopically visible ulceration.

Therapy

The treatment of choice is thiabendazole 25 mg./kg. twice a day for two days with a maximum dose of 3 grams per day (13). In patients with renal failure who cannot tolerate thiabendazole, mebendazole 100 mg. b.i.d. for three days may be utilized with a cure rate of 50 percent or less after this treatment regimen (8).

Hyperinfection syndrome

The hyperinfection syndrome occurs when a large number of filiform larvae invade the intestinal and colonic wall resulting in a marked endo-auto-infection. The larvae can be found in multiple organs and these patients frequently have a decreased eosinophil count rather than eosinophilia. In 45 percent of these patients, there was a severe concurrent bacterial or yeast infection (14).

Polymicrobial sepsis or a gram negative meningitis without an obvious portal of entry mandates that a Strongyloides infection be ruled out. The majority of these patients are immunocompromised and most have a form of lymphatic cancer or are receiving corticosteroids. A longer course of thiabendazole is given (2 to 3 weeks) and the associated infections are treated, but despite this, mortality approaches 80 percent. Risk factors for a symptomatic Strongyloides infection include recent immigration from an endemic area, white race, male, recent use of corticosteroids, the presence of an underlying malignancy, and prior gastric surgery.

In one series, the relative risk of a Strongyloides infection following gastric surgery was greater when compared to these other categories (15). Some of the patients reported in this series may have had surgery because of non-healing Strongyloides associated ulcerations. Achlorhydria resulting from surgery may have improved the survival and infectivity of the migrating adult larvae.

The patient presented had a course typical of Strongyloides. Most likely he had had carriage for a period of time since he did not have any recent risks for exposure. His visits to Maine may have been the source of the blastocystis hominis but the region is not endemic for Strongyloides. The history of asthma and cough may have been partly due to the Strongyloides. Reactivation to symptomatic disease likely occurred because of the use of corticosteroids. Finally, he is fortunate in that he failed to develop the hyperinfection syndrome following the use of corticosteroids.

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Use double spacing throughout, including (in the following order) title page, abstract, text, acknowledgements, references, tables, and legends for illustrations. Begin each of the following sections on separate pages: title page, abstract, text, acknowledgements, references, individual tables, and legends for illustrations. Number pages consecutively, beginning with the title page. Type the page number in the upper right-hand corner of each page.

Articles contained on computer diskettes are acceptable and encouraged. Please contact the *Journal* in advance to determine the format type to be used. The conventional manuscript as described above must accompany the diskette.

All persons designated as authors should qualify for authorship. Each author should have participated sufficiently in the work to take public responsibility for the concept.

The second page should carry an abstract of no more than 150 words summarizing the manuscript.

Where reference is made to generically-designated drugs, the first such reference must be followed by parentheses containing the most commonly known trade-name drug of that designation. In addition, a listing of all generic drugs mentioned in the article, with their trade-name equivalents, should appear at the end of the article.

Tables (tabular listings) and figures (photos, drawings and charts) should be numbered and the point of reference in the text indicated in parentheses, i.e., (Table 1), (Figure 1).

Photos must be good-quality unmounted glossy prints usually 5 by 7 in. but no larger than 8 by 10 in. Black and white photos are preferred. Color photos will be printed in black and white. Cost of printing photos in excess of four will be billed to the author.

Each photo (figure) should have a label pasted on its back indicating the name, its number and an indication of its "top." A separate legend should be provided for each photo. Do not write on the back of photos, or scratch or mar them using paper clips. Do not mount them on cardboard. Drawings and charts should be done in solid black on pure white.

Number references consecutively in the order in which they are first mentioned in the text. Identify references in text, tables, and legends by arabic numerals (in parentheses).

No more than 25 references will be published free of charge to the author.

Use the style of references seen in this *Journal*, which is based on the formats used by the U. S. National Library of Medicine in *Index Medicus*. The titles of journals should be abbreviated according to the style used in *Index Medicus*. Consult "List of the Journals Indexed," printed annually in the January issue of *Index Medicus*.

All scientific material appearing in the *Journal* is reviewed by the Publication Committee. Manuscripts should be mailed to The Editor, West Virginia Medical Journal, Box 4106, Charleston, WV 25364.

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1. Ann Intern Med 1982;96:766-71.

West Virginia Chapter
AMERICAN COLLEGE OF SURGEONS
Annual Spring Meeting
April 29 - May 2, 1992
The Greenbrier — White Sulphur Springs, WV
10 Hours CME

GUEST SPEAKERS: William C. Wood, M.D., F.A.C.S.
Professor & Chairman, Surgery
Emory University
"Breast Cancer: How Much Has Changed, Yet How Little"
"The Changing Management of Colorectal Cancer"

Talmadge A. Bowden, Jr., M.D., F.A.C.S.
Professor of Surgery
Medical College of Georgia
"Management of Gastrointestinal Bleeding"
"Complex Enterocutaneous Fistulas"

Other Statewide Speakers, Including the Annual Residents' Competition — Saturday
Tennis Tournament — Thursday, Golf Tournament — Friday
Registration: WV Chapter American College of Surgeons
P. O. Box 1107
Morgantown, WV 26505
Rooms: The Greenbrier — (304) 536-1110

President's Page

Constantino Y. Amores M.D.

The future of medicine

Just like a tree, the WVSMA is blessed with strong roots and numerous branches from which new life is constantly emerging. It is with this concept in mind that I want to express just how pleased I am about the revitalization of the WVSMA's Medical Student Section (WVSMA-MSS).

At the WVSMA's Mid-Winter Clinical Conference in January, students from both campuses of the West Virginia University School of Medicine and the Marshall University School of Medicine met with WVSMA Vice President Dr. James Comerci, WVSMA Membership Coordinator Donna Webb, and myself.

As a result of this valuable interaction, the WVSMA-MSS decided to have a one-day planning and informational session in Charleston at the WVSMA office on Saturday, March 21. This important event was attended by three students from each campus, as well as Policy Analyst for AMA Medical Student Services Sharon Swan, WVSMA Executive Director George Rider, WVSMA Associate Executive Director Thom Stevens, Dr. Comerci, Donna and myself.

This meeting gave the WVSMA-MSS a renewed sense of direction and the members present set forth the following objective:

TO PROMOTE MEMBERSHIP IN THE WVSMA-MSS AND PARTICIPATION IN THE LOCAL CAMPUS SOCIETIES, WITH THE OVERALL GOAL OF BECOMING A UNIFIED, FUNCTIONING BODY REPRESENTING THE MEDICAL STUDENTS OF THE STATE OF WEST VIRGINIA.

I am well aware of the fact that our medical students barely have any time to spare, but I want to encourage the involvement of as many students as possible in the WVSMA-MSS and I hope our members realize how valuable their participation is. Recent news reports have stated that there is a sharp increase in the number of medical students who are planning to remain in the state next year to complete their residencies, which hopefully signifies that more of today's students will be practicing in West Virginia tomorrow. These men and women hold the key to the future of medicine through their role in organized medicine now.

When these medical students become members of the WVSMA, they also become members of the AMA and receive the publications and benefits of both these organizations. Their representatives will have a say in the policy-making processes of the WVSMA and AMA, therefore shaping the practice of medicine in this state and country.

I want to take this opportunity to congratulate the WVSMA-MSS members who were elected officers: Kevin Kaufman, president, who represents the Morgantown campus of the WVU School of Medicine; Richard Wilson Jr., vice president, who represents the MU School of Medicine; and Daniel Stickler, secretary-treasurer, who represents the Charleston campus of the WVU School of Medicine. These three officers wrote the messages for this month's Medical Student News page; a new monthly feature in the *Journal* which is also another positive result of our recent meetings with the WVSMA-MSS.

As our new medical student leaders begin their duties, I want them to know they have our support and encouragement.

Constantino Y. Amores, M.D.

The family

So, the AMA has announced a new campaign against family violence. (See page 155). We wonder who is in favor of family violence. We believe the focus of the new campaign is a little too narrow.

A focus on the family is needed, all right. Families do fight and get nasty, but families can do a lot of other positive things that need encouragement. Things like teaching their children what is right and what is wrong.

We hear educators say that our children need to be taught right from wrong. "We can have no discipline if students have no concept of right and wrong, and without discipline we can teach nothing," goes the argument.

Maybe so, but school is the last place we should expect, or perhaps want, anyone to hold forth on right and wrong. Sadly, we have come to recognize that what is taught in school is what is trendy and fashionable or politically correct from history to economics and philosophy.

Right and wrong can never be defined along trendy guidelines. The strongest religious denominations and those with the most numerous followers are the ones which have adhered the most stubbornly to age old, spiritually defined interpretations of right and wrong. Sadly, we observe many religious groups surrendering to trendy moral concepts defined and refined by commercial success of media entertainment efforts. People see and giggle at entertainers mouthing vulgarities and obscenities and it quickly becomes fashionable and smart for the audience to use similar expressions. Soon, use of such language is not even regarded as bad manners. Another crack appears in the foundation of civil interchange and the concept of anything having the quality of rightness or wrongness suffers another blow.

School is not the place to teach what is right and what is wrong. Such teaching needs to come from families and churches. Schools can teach what is legal and what is illegal. Good schools can demonstrate many things for which a student can expect punishment and other things which merit praise. The subject matter of these lessons is not synonymous with right or wrong.

Alarmingly, a generation or two has now been raised that seems to regard wrong as another's possession of something I want, and right as the power needed to take from another what I want. We may have reached the point that no one in the home or family has any definitions other than these to teach.

We learn best by example, but the most numerous and most popular current examples appear to be universally bad. A distressing thought.

And where does Medicine fit into this picture? We are simply a part of that great mass of people vulnerable to the new moral theologians to the same extent as anyone else. We fancy ourselves as superior to many in thoughtful pursuits and expert in analysis of the ills of the human body. Our diagnostic skills and fancy technology fail us, however, in our analysis of the ills of the human spirit. Those claiming to have a spiritual penicillin stand at the altars of churches. Perhaps they have such a remedy. We surely have none in our offices or hospitals. And trendy pedagogues standing at their blackboards resemble more a smiling mortician than a healer of such sick spirits.

In spite of its limitations, we encourage participation in the AMA campaign against family violence. At least we are looking in the direction of the family. When we broaden our scope in regard to families, we will perhaps promote and revivify the very means of our own later salvation.

— SDW

Our Readers Speak

Native lithium and mental morbidity

Lithium reportedly has a narrow serum value range in the human at 0.00396mEq/L. This brief note presents data of five mentally ill patients from a general practice with a pooled estimate of <0.00114mEq/L compared to the norm cited above. Analysis was by atomic absorption spectrophotometry.

The null hypothesis proposed was of no difference between groups and equality of the normal serum lithium value to the pooled estimate of the general practice patients. On a normal distribution for serum lithium values, the standard is 0.498, and that for the pooled estimate 0.500, a difference of 0.2 percent.

These values support the null hypothesis of no statistically significant difference.

John Henry McWhorter, M.D., M.P.H.
P.O. Box 201
McWhorter, WV 26401

Additional findings on readability

The recent scientific article by Dr. S. J. Jubelirer (1) describing the readability of educational materials for the general public, reflects experiences similar to those of the Tri-State Literacy Council (TSLC).

At the request of clinics and other community organizations, TSLC has determined the readability of 70 health pamphlets and government documents by means of 9 computerized formulae (1). Among these were the Fog (precursor of SMOG) and Fry. SMOG/Fog always score high, one to two grade levels above other formulae, but are the easiest to use manually. The Fry, almost as easy, agrees with most other formulae, but requires special Fry graphs. The Dall-Chall, another of our nine, is most widely used by linguists, but without computer assistance is inordinately time consuming. Formula variables shown in Figure 1 explain why grade levels calculated by various formulae differ.

Using the 9-formulae computer system, TSLC found that 30 percent of pamphlets were "acceptable" (grade level below 7); 30 percent were "unacceptable" (grade 11 or above); and with a few changes the remaining 40 percent could have been classified as "acceptable." None of our "informed consent" and other legal documents were written below grade 12.

It is of interest that the educational level of 110 adults enrolled in the TSLC literacy program during the past year represent grade levels similar to those of Dr. Jubelirer's patients at the Cancer Care Center of West Virginia (CCC) (Figure 2). Note particularly grades 10-12, almost identical in CCC and TSLC. Does this indicate similar geographic areas or is it indicative of the discrepancy between literacy level and grade level achieved?

As additional aids to those guidelines listed by Dr. Jubelirer to improve readability, especially for those writing educational materials on complex subjects, we suggest the following: (These are based on analysis of the 30 percent "acceptable" pamphlets previously mentioned.)

1) Use 35 or fewer three syllable words per 350 words or only 1 in every 10 words. Most of these words should be those listed in the Dale list of 3,000 familar words (3).

2) Sentences should be short, with eight sentences or more per 100 words.

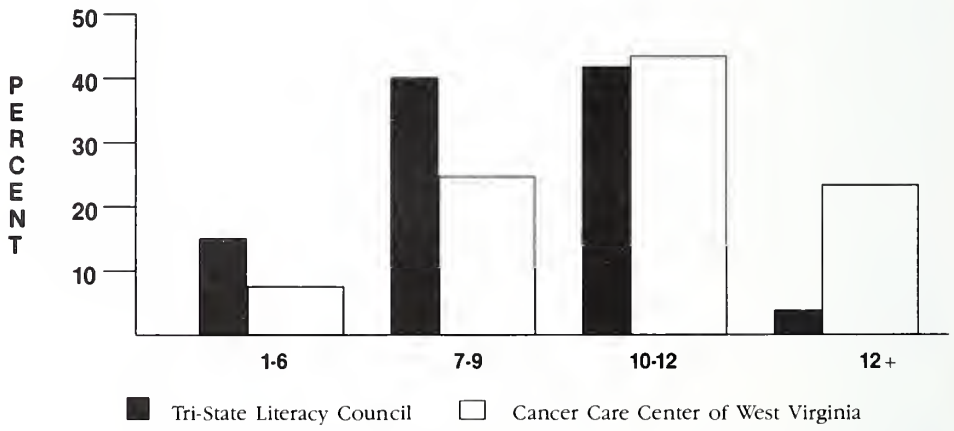
3) Number of syllables per 100 words should be 140 or less.

4) Use active voice and as few modifiers as possible.

Figure 1. Formula Variables

	SYLLABLE: WORD	SENTENCE: WORD	DALE LIST	3 SYLLABLE WORDS	WORD LENGTH	SENTENCE COUNT	WORD COUNT
DALE-CHALL		X	X			X	X
HOLMQUIST		X	X			X	X
ARI		X			X	X	X
FLESCH	X					X	X
KINCAID	X					X	X
POWERS	X					X	X
FRY	X	X				X	X
COLEMAN		X			X	X	X
FOG		X		X		X	X

Figure 2. Highest Grade Completed



Sincerely,
M.G. Stemmermann, M.D.
Professional Advisor
Tri-State Literacy Council

References

1. Jubelirer SJ. Level of reading difficulty in educational pamphlets and informed consent documents for cancer patients. W Va Med J 1991; 87:554-7.

2. Schuyler M. A readability formula program. Dallas: Micro Power and Light Company.

3. Goltz CR. A table for the quick computation of readability scores using the Dale-Chall Formula. J Devel Reading; Spring 1964.

Millions Victimized by Family Members Every Year!

Are you concerned about the effects of family violence and victimization within your community?

Become an advocate within your community for the prevention of family violence.

Violence among family members has reached staggering proportions. Every year more than 2 million cases of child abuse and neglect are reported, between 2 and 4 million women are battered by their spouses, and between 700,000 and 1.1 million of the elderly population are abused.

The American Medical Association has formed a *National Coalition of Physicians Against Family Violence*. Through the *Coalition* the American Medical Association hopes to involve you in activities that address issues of child abuse, sexual assualt, domestic violence and elder abuse because you have the unique ability to identify the symptoms, first-hand. By joining the *National Coalition* you will be showing your concern about the effects of family violence and victimization, and will become a committed advocate within your community for the prevention of family violence.

Through the *Coalition* you will:

- be informed about local contacts and referrals
- become aware of local and regional resources
- be provided with information regarding model educational programs
- become aware of treatment guidelines and protocols.
- have access to newsletters, public education materials and other publications
- receive an official membership card and frameable poster alerting your patients of your interest in and concern for this problem.

The only **cost** to you **is your commitment** to help curb this problem. Simply complete the membership application form below and mail to the Department of Mental Health, American Medical Association, 515 N. State Street, Chicago, IL 60610.

Yes, include my name in the *Coalition's* membership

Name _____

Address _____

City/State/Zip _____ Telephone # _____

Specialty _____

Auxiliary Member ☐ Yes ☐ No Other _____

Area of interest within Family Violence: ☐ Child Abuse ☐ Sexual Assault ☐ Domestic Violence

☐ Elder Abuse ☐ Other

American Medical Association

Physicians dedicated to the health of America

Trauma topic of Second Session at Annual Meeting

The WVSMA's 125th Annual Meeting, which is scheduled for August 19-25 at The Greenbrier in White Sulphur Springs, will again feature two sessions devoted to scientific topics and health care issues. This year's Second General Session will highlight the subject of trauma care with a panel of four physicians.

Set for Friday, August 21 at 9 a.m., the Second Session will present the following speakers: **Howard H. Kaufman, M.D.**, professor and chairman of the department of neurosurgery at WVU; **Howard R. Champion, M.D., F.R.C.S., F.A.C.S.**, chief of trauma service and director of surgical critical care and emergency services at Washington Hospital Center in Washington, D.C.; **Gregory A. Timberlake, M.D.**, associate professor of surgery at WVU; and **Donald D. Trunkey, M.D.**, professor and chairman of the department of surgery at Oregon Health Sciences University in Portland, Ore. Moderator of this session will be Thomas H. Chang, M.D., program chairman of the WVSMA's Annual Meeting.

In addition to their presentations for the Second Session, Drs. Champion and Trunkey will also be speaking on the topic of "Controversies in Trauma," at the breakfast meeting of the WVSMA Section on Surgery, which is planned for Friday, August 21 at 7 a.m. This breakfast meeting is open to all registered participants at the WVSMA's Annual Meeting.

Biographical information about Drs. Kaufman, Champion, Timberlake and Trunkey begins below. For other details about the meeting, please contact Nancie Divvens at 925-0342.

Kaufman

Champion

Timberlake

Trunkey

Speakers Highlighted

Dr. Kaufman received his medical degree from the Columbia University College of Physicians in New York City in 1966 and did a surgical internship at the University of Minnesota in Minneapolis.

Following his internship, Dr. Kaufman was a fellow at the National Hospital for Nervous Diseases in London for a year. He then returned to the United States for more studies in neurological surgery at the National Institute of Neurological Disease and Stroke in Bethesda, Md., and the Neurological Institute of New York in New York City.

In 1974, Dr. Kaufman accepted a position as an assistant professor of neurosurgery at the University of Arizona in Tucson. He relocated the next year to Houston to become an assistant professor of neurosurgery at the University of Texas Medical School. Promoted to associate professor status in 1979, Dr. Kaufman also accepted additional teaching responsibilities as a clinical assistant professor in the Division of Neurosurgery at the Galveston branch of UT.

Four years later, Dr. Kaufman moved to West Virginia to become a professor and associate chairman of the Department of Neurosurgery at the WVU School of Medicine. In 1986, he was elevated to his current role as professor and chairman of the department.

Dr. Kaufman has been a visiting professor at 11 schools and medical facilities in the United States. He is a lieutenant colonel in the USAMC and is a member of the editorial board for the scientific journal *Neurosurgery*.

Dr. Champion was born in Leeds, England, and received his medical degree from the Leeds University Medical School in 1967. He received his clinical training in England at St. James University Hospital, Leeds General Infirmary, University Hospital of South Manchester, The Birmingham Accident Hospital, and the Royal Infirmary.

In 1973, Dr. Champion relocated to the United States and continued his postgraduate training at the Maryland Institute for Emergency Services Systems at the University of Maryland in Baltimore. The following year, he remained at the institute to serve as assistant clinical director, but then left in 1976 to accept his current post as chief director of trauma service for surgical critical care and emergency services at Washington Hospital Center. In 1987, Dr. Champion accepted his other present role as chief of the division of surgery for trauma at the Uniformed Services University of the Health Sciences in Bethesda, Md., where he also serves as a professor of surgery.

A fellow of the Royal College of Surgeons, the American College of Surgeons and the American Association for the Surgery of Trauma, Dr. Champion is very active in many national and international organizations. He is president of both the Eastern Association for the Surgery of Trauma and the

International Asssociation for the Surgery of Trauma and Surgical Intensive Care; secretary of the American Trauma Society; a member of the board of directors of the World Association for disaster and emergency medicine; and senior member of the Committee on Trauma for the American College of Surgeons.

A noted author, Dr. Champion has written or co-authored over 200 books, book chapters, articles and abstracts. In addition, he is a consultant reviewer for seven journals, including the *Journal of Critical Care Medicine, The Journal of the American Medical Association, The Journal of Trauma* and *American Journal of Public Health*.

Dr. Timberlake was born in Washington, D.C., and received his bachelor's degree and medical degree from the University of Virginia in Charlottesville, Va., where he also did an internship in surgery.

In 1977, Dr. Timberlake moved to California and did an internship in basic surgery at the Naval Regional Medical Center in San Diego and then took a post as a general medical officer at the U.S. Naval Regional Medical Center in Okinawa, Japan. In 1979, he returned to California to the Naval Regional Medical Center to do a four-year residency in general surgery.

Following his residency, Dr. Timberlake accepted an assignment in Rota, Spain, as head of the general surgery service at the U.S. Naval Hospital. He was promoted to director of surgical services at the hospital in 1985, but left that year to do a fellowship in trauma/critical care surgery at Tulane University Medical Center and the Charity Hospital of Louisana.

Dr. Timberlake again relocated to San Diego in 1986 to become staff general surgeon in the department of surgery at the U.S. Naval Hospital. During the next three years, he held this position and was a clinical assistant professor of surgery at the F. Edward Herbert School of Medicine in Bethesda, Md., before coming to Morgantown to accept his current roles as an associate professor and head of the section of trauma and emergency surgery at the WVU Health Sciences Center and director of the Jon Michael Moore Trauma Center.

Dr. Timberlake has been very active in military medicine and serves as chairman of the U.S. Navy Committee on Trauma with the State American College of Surgeons. From August 1990 to April 1991, he served in Operation Desert Storm.

Dr. Trunkey was born and raised in the farm country in eastern Washington. He received both his undergraduate and his medical degree from Washington State University, and decided to specialize in surgery after a rotating internship with Dr. Bert Dunphy at the University of Oregon.

Following his internship, Dr. Trunkey spent two years in the United States Army as a general medical officer in Germany and then rejoined Dr. Dunphy at the University of California in San Francisco to complete his general surgery training. During this time, he also spent a year studying at the Organ Preservation Laboratory.

After completing his general surgery training, Dr. Trunkey did additional postgraduate studies at Southwestern Medical Center in Dallas where he was involved in a National Institutes of Health special fellowship in trauma. Upon completion of his fellowship, Dr. Trunkey returned to the University of California and devoted his career to caring for trauma patients. He was named chief of the Burn Center at San Francisco General Hospital and became very interested in elective vascular surgery and non-cardiac thoracic surgery. He established a laboratory to explore the mechanisms of shock at the cellular level with a special emphasis in myocardial performance following shock, lung injury and cellular immune mechanisms following injury.

In 1978, Dr. Trunkey became chief of surgery at San Francisco General Hospital and vice chairman of the department of surgery at the University of California, where the next year he was promoted to professor. Eight years later, Dr. Trunkey relocated to Oregon to accepted his present position as professor and chairman of the Oregon Health Sciences University.

Tri-State Association of Filipino Americans plans CME meeting

The Tri-State Association of Filipino Americans has scheduled a CME session for the afternoon of May 9 at the Marriott Hotel in Charleston.

The meeting will begin at 1 p.m., with a presentation on "Voiding Dysfunction," by Rene Sullesta, M.D., a Charleston urologist and an associate professor at the WVU Health Sciences Center, Charleston Division. Next, Audiologist Gary Harris, Ph.D, president of the West Virginia Speech, Language and Hearing Association, will present his talk on "The Wonder of Hearing."

Following a break at 1:55 p.m., the meeting will reconvene with Rano S. Bofill, M.D., a radiologist at Williamson Memorial Hospital in Williamson, addressing the topic of "Mammography." The session will then conclude with a lecture on "Diabetic Nephropathy," by Julian Espiritu, M.D., a Charleston nephrologist and internist who is an associate professor at the WVU Health Sciences Center, Charleston.

Category I credit is being offered through St. Francis Hospital in Charleston. For more details, contact Dr. Bofill at 235-2500.

Wilderness medicine seminar scheduled for May 15-17

HealthNet and the Department of Emergency Medicine at the Charleston Area Medical Center will present the 5th Annual Wilderness Medicine Seminar, May 15-17, with CME activities at the Holiday Inn-Charleston House and on the New River as part of a special whitewater rafting trip.

Seminar topics include travel-related illnesses, wilderness dermatology, hazardous marine life, drowning, tick-borne disease, insect allergies, wilderness rescue, and venomous and non-venomous snakes.

The program has been reviewed and is acceptable for 11 prescribed credit hours by the American Academy of Family Physicians for 11 hours of ACEP Category I credit, and 11 hours CAT 2A of the American Osteopathic Association. HealthExpo, West Virginia's only physician recruitment fair, is being held at the Holiday Inn - Charleston House in conjunction with the seminar.

For more details or to register, contact Dr. David Seidler at CAMC's Department of Emergency Medicine, 348-9015.

The Stage Is Set!

The West Virginia State Medical Association's 125th Annual Meeting

August 19 - 22, 1992
The Greenbrier
White Sulphur Springs, West Virginia

Please be sure to make hotel reservations in advance by calling **1-800-624-6070.** The State Fair is the same week and the hotel fills up quickly. For information about other area hotels, call the WVSMA at (304) 925-0342.

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Physician Members and Physician Assistants - $125.00
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Charleston, WV 25364

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1. Data on file, Lilly Research Laboratories. *See accompanying page for prescribing information.* © 1991, ELI LILLY AND COMPANY NZ-2947-B-249304

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Brief Summary. Consult the package insert for complete prescribing information.

Indications and Usage: 1. *Active duodenal ulcer*—for up to 8 weeks of treatment at a dosage of 300 mg h.s. or 150 mg b.i.d. Most patients heal within 4 weeks.

2. *Maintenance therapy*—for healed duodenal ulcer patients at a dosage of 150 mg h.s. at bedtime. The consequences of therapy with Axid for longer than 1 year are not known.

3. *Gastroesophageal reflux disease (GERD)*—for up to 12 weeks of treatment of endoscopically diagnosed esophagitis, including erosive and ulcerative esophagitis, and associated heartburn at a dosage of 150 mg b.i.d.

Contraindication: Known hypersensitivity to the drug. Because cross sensitivity in this class of compounds has been observed, H_2-receptor antagonists, including Axid, should not be administered to patients with a history of hypersensitivity to other H_2-receptor antagonists.

Precautions: *General*—1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Dosage should be reduced in patients with moderate to severe renal insufficiency.

3. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

Laboratory Tests—False-positive tests for urobilinogen with Multistix® may occur during therapy.

Drug Interactions—No interactions have been observed with theophylline, chlordiazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450 enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increased serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility—A 2-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a 2-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups.The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a 2-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in 1 fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in 1 fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Worldwide, controlled clinical trials included over 6,000 patients given nizatidine in studies of varying durations. Placebo-controlled trials in the United States and Canada included over 2,600 patients given nizatidine and over 1,700 given placebo. Among the adverse events in these placebo-controlled trials, only anemia (0.2% vs 0%) and urticaria (0.5% vs 0.1%) were significantly more common in the nizatidine group. Of the adverse events that occurred at a frequency of 1% or more, there was no statistically significant difference between Axid and placebo in the incidence of any of these events (see package insert for complete information).

A variety of less common events were also reported; it was not possible to determine whether these were caused by nizatidine.

Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to 3 times the upper limit of normal, however, did not significantly differ from that in placebo patients. All abnormalities were reversible after discontinuation of Axid. Since market introduction, hepatitis and jaundice have been reported. Rare cases of cholestatic or mixed hepatocellular and cholestatic injury with jaundice have been reported with reversal of the abnormalities after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in 2 individuals administered Axid and in 3 untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of anti-androgenic activity due to nizatidine. Impotence and decreased libido were reported with similar frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Anemia was reported significantly more frequently in nizatidine than in placebo-treated patients. Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H_2-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental—Urticaria was reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity—As with other H_2-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. The ability of hemodialysis to remove nizatidine from the body has not been conclusively demonstrated; however, due to its large volume of distribution, nizatidine is not expected to be efficiently removed from the body by this method.

PV 2093 AMP [101591]

Additional information available to the profession on request.

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Description: Yohimbine is a 3a-15a-20B-17a-hydroxy Yohimbine-16a-carboxylic acid methyl ester. The alkaloid is found in Rubaceae and related trees. Also in Rauwolfia Serpentina (L) Benth. Yohimbine is an indolalkylamine alkaloid with chemical similarity to reserpine. It is a crystalline powder, odorless. Each compressed tablet contains (1/12 gr.) 5.4 mg of Yohimbine Hydrochloride.

Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalmic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon® is indicated as a sympathicolytic and mydriatric. It may have activity as an aphrodisiac.

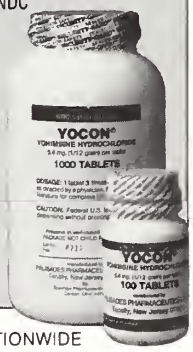
Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.[1,2] Also dizziness, headache, skin flushing reported when used orally.[1,3]

Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.[1,3,4] 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to ½ tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.[3]

How Supplied: Oral tablets of Yocon® 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.



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1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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Continuing Medical Education

Listed on this page are some of the upcoming CME programs which will be held in the state.

The programs this month were compiled by: Patricia Barnhart, WVSMA loss control coordinator; Robin Rector, coordinator of CME for Charleston Area Medical Center; Kari Long, program director of CME and rural services for WVU; and Thelma Wilson, education coordinator for the Raleigh County Medical Society.

Futher details about these CME activities may be obtained by calling Barnhart at 925-0342; Rector at 348-9580; Long at 293-3937; and Wilson at 255-6341. Other state and national meetings are listed in the Medical Meetings section of the *Journal*.

If you would like to have the CME programs offered by your institution or association for physicians published in the Journal, please contact Nancy Hill, managing editor, at 925-0342.

West Virginia State Medical Association - Charleston

April 25 - "First Generation Loss Control Seminar," Ramada Inn, South Charleston

May 9 - "Marbury v. Madison Loss Control Seminar," Lakeview Resort, Morgantown

CAMC/WVU Health Sciences Center - Charleston

April 25 - "Wound Care Management," 7:30 a.m. - 4:30 p.m., WVU Health Sciences Center, auditorium

April 27 - "Neonatal Home Care," (teleconference), 12:30 p.m. - 1:30 p.m., Women and Children's Hospital, Boardroom A

April 29 - "Research Day," 8 a.m. - 1 p.m., WVU Health Sciences Center, auditorium

May 2 - "Current Trends and Controversies in the Treatment of Cerebrovascular Disease," 8 a.m. - 2:30 p.m., Charleston Marriott Hotel

May 11 - "Level of Reading Difficulty in Educational Pamphlets and Informed Consent Documents for Cancer Patients: A Research Presentation," 12:30 p.m. - 1:30 p.m., WVU Health Sciences Center, Room 2014 AB

WVU Health Sciences Center - Morgantown

April 23-26 - "West Virginia Academy of Ophthalmology's 45th Annual National Spring Meeting," The Greenbrier, White Sulphur Springs (in conjunction with the WVU School of Medicine's Department of Ophthalmology and the West Virginia Academy of Ophthalmology)

May 8 - "Solving the Health Care Crisis: Does Oregon Have the Answer?" WVU Health Sciences Center (in conjunction with the West Virginia Network of Ethics Committees and the Center for Health Ethics and Law)

Raleigh County Medical Society - Beckley

April 23 - "NSAID Induced Upper G.I. Damage," Ali Dagher, M.D., Black Knight Country Club, 6:30 p.m.

American Academy of Pediatrics/WV Chapter

May 2-3 - "Spring Meeting of the American Academy of Pediatrics/WV Chapter," Holiday Inn, Oak Hill

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American Heart Association

Outreach Programs

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★ *WVU Health Sciences Center, Morgantown*

☐ *CAMC/WVU Health Sciences*

Logan ☐ Logan General Hospital, April 24, noon, "Care of Brain Tumors," Constantino Y. Amores, M.D.

Man ☐ Man Appalachian Regional Hospital, April 21, 7 p.m., "Pediatric Surgical Problems," Eduardo Suson, M.D.

New Martinsville ★ Wetzel County Hospital, May 14, TBA*, Bruce Weinstein, Ph.D.

Parkersburg ★ Camden-Clark Memorial Hospital, April 22, 7 a.m., "Smoke Inhalation Injuries: Medical Management and Outcomes," Mario Battigelli, M.D.

Camden-Clark Memorial Hospital, April 29, 7 a.m., "Medical and Surgical Treatment of Difficult Pain Problems," Stephen Bloomfield, M.D.

Camden-Clark Memorial Hospital, May 6, 7 a.m., "The Hospital Ethics Committee and You," Bruce Weinstein, Ph.D.

Camden-Clark Memorial Hospital, May 13, 7 a.m., "Hazardous Materials and Medical Professional Responsibilities," Mario Battigelli, M.D.

Point Pleasant ☐ Pleasant Valley Hospital, April 23, noon, TBA*

Spencer ☐ Roane General Hospital, April 21, 12:30 p.m., "Sports Medicine," David Soulsby, M.D.

South Williamson, Ky. ☐ South Williamson Appalachian Regional Hospital, April 23, 5:30 p.m., TBA*

Waynesburg, Pa. ★ Greene County Memorial Hospital, 7 p.m. "Office Dermatology," William Welton, M.D.

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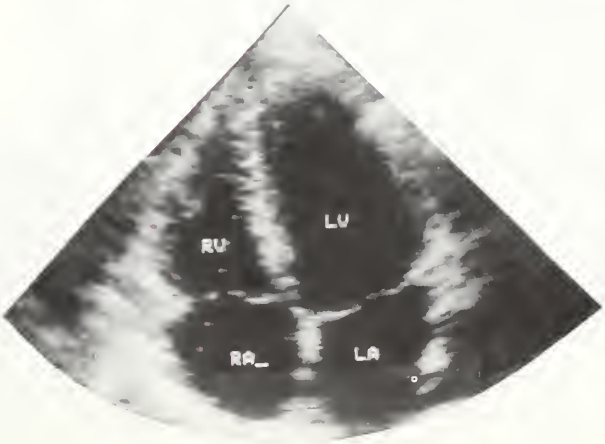

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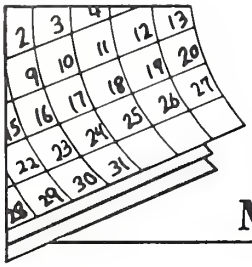


Medical Meetings

May

1—Seminar in Pulse Dye Cutaneous Laser Surgery: A "Hands-On" Supervised Workshop for Physicians, Georgetown University Medical Center, Washington, D.C.

2—Cancer Pain Management, Ohio State University, Columbus, Ohio.

2-3—Spring Meeting of the American Academy of Pediatrics/WV Chapter, Oak Hill

2-7—American Psychiatric Association, Washington, D.C.

6-9—National Rural Health Association's 15th Annual National Conference, Washington, D.C.

7-9—38th Annual Meeting of the American Society for Artificial Internal Organs, Nashville, Tenn.

7-9—Second Annual Cardiovascular Disease Review and Update, Rush Heart Institute and Rush-Presbyterian-St. Luke's Medical Center, Chicago.

8—Solving the Health Care Crisis: Does Oregon Have the Answer? Fifth Annual Symposium of the West Virginia Network of Ethics Committees, Morgantown.

8-9—The Second Annual Geriatric Clinical Update -- Therapeutics and the Elderly: The Practical Use of Common Pharmacological Therapies, Ohio State University, Columbus.

14-15—Quality Assurance and Risk Management Conference: Establishing Excellence in Primary Care, WVU Central AHEC, Charleston.

15—Magee Rehabilitation Hospital's 3rd Annual Stroke Conference, Philadelphia.

15-17—5th Annual Wilderness Medicine Seminar, HealthNet and the Department of Emergency Medicine at CAMC, Charleston.

17-22—Institute for Healthcare Quality Management, Healthcare Quality Education Foundation, Seattle.

22-25—Tenth National Annual Spring Meeting of the West Virginia Academy of Otolaryngology - Head and Neck Surgery, Inc. White Sulphur Springs.

25-26—Second International Symposium on the Management of Acute and Cancer Pain, Georgetown University Medical Center's Department of Anesthesia, Paris.

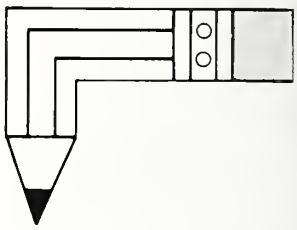
25-28—Fourth Global Congress on Patient Cards and the Computerization of Health Records, Medical Records Institute Europe e.V., Berlin.

30—3rd Annual Rush Symposium on Transplantation, Rush Presbyterian-St. Luke's Medical Center, Chicago.

For More Information . . .

Contact the Journal for additional information about most of the above meetings. Call (304) 925-0342.

Poetry Corner



Jerry's Seascape

The wind blew grains of sand on a small mound
And they rolled oer the edge and out of sight
Such a way to move mountains
Such a way to fill valleys
Like ants on the march
Like geese in full flight.

Little shore birds
with the fastest legs
Beat the foaming curl of the surf
While very small crabs and wee small worms
Make a meal for the gulls and the terns.
While the pelican moves with effortless flight
And picks up food for the night.

The clouds and the sun
Play hide and seek
While the delft blue sky covers all
The bright yellow sand
never a footprint shows
While the wet brown sand tells it all.

The ocean is talking
In measured beats walking
The moon driven risings to fill
While as far as you can see
There comes a ship that must be
Your fortune coming in from the sea.

O what a day to go sailing
over millions of miles
And the end of daylight failing
To sail on by starlight
Sail the sea by moonlight
No end, no beginning for me.

J. Paul Aliff, M.D.

Please address your submissions for Poetry Corner to: Stephen D. Ward, M.D., Editor, West Virginia Medical Journal, Box 4106, Charleston, WV 25364.

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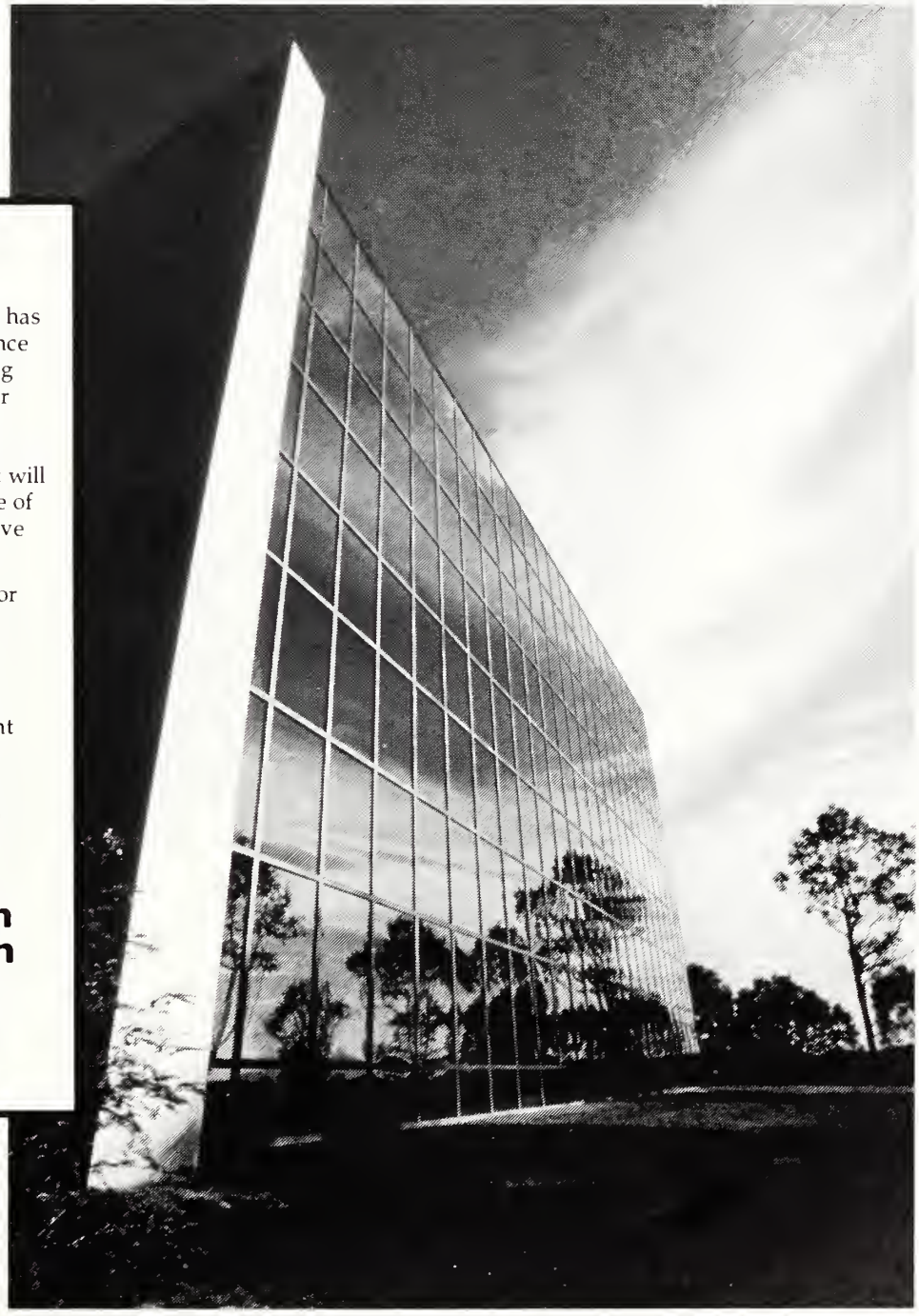

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Department of Health & Human Resources

Bureau of Public Health News

This page of material is submitted and paid for by the Bureau of Public Health.

Annual black lung clinics conference set

The fourth annual Black Lung Clinics Program Conference is scheduled for May 6-8 at the Alpine Lake Conference Center in Terra Alta.

The conference is open to black lung clinic staff and others interested and involved in the treatment and care of black lung patients and their families.

Looking ahead, the National Coalition of Black Lung and Respiratory Disease Clinic, Inc.'s tenth annual conference will be held in Charleston, October 14-16.

For more information on either conference, contact James Nafe at 558-4007.

New immunization rules announced

Beginning with the fall 1992-93 school term, state law will require all kindergarteners to have two measles and rubella vaccinations in order to be eligible to enter school in West Virginia.

The U.S. Public Health Service's Immunization Practices Advisory Committee has recommended the change from one dose to two doses to ensure that all children respond to the vaccine. The vaccine of choice is measles-mumps-rubella (MMR).

Questions about the availability of second doses of MMR for public clinic patients may be referred to your county health department.

Information is also available from the state Immunization Program at 1-800-642-3634 or 558-2188.

Lifestyle health risk survey released

"The 1990 Behavioral Risk Factor Survey: A Report on the Lifestyle Behaviors Affecting the Health of West Virginians" has been released by the Bureau's Office of Epidemiology and Health Promotion.

The report covers data obtained in 1990 on health behaviors, or behavioral risk factors, that can increase the risk of preventable illnesses and death. Those factors include not using seatbelts, hypertension, obesity and excess weight, sedentary lifestyle, cigarette smoking, smokeless tobacco use and alcohol misuse.

The survey is conducted as part of the Behavioral Risk Factor Surveillance System (BRFSS), which was established by the Centers for Disease Control in 1984. It allows states to determine the prevalence of these selected health risk factors among their adult population. Forty-four states and the District of Columbia took part in the 1990 survey.

For more information, or to request a copy of the report, contact Genie Thoenen at 558-9100.

Safe drinking water week proclaimed

May 3-9 has been proclaimed "National Safe Drinking Water Week," in appreciation of the work involved in making the public drinking water supply safe. This week is also designated each year as a time to make the public aware of ways they can protect their water source and ensure adequate drinking water supplies by using conservation techniques.

In West Virginia, the Bureau's Environmental Engineering Division is charged with carrying out the provisions of the federal "Safe Drinking Water Act." The act, through state primacy, affects and regulates each of the state's 2,500 public water systems. This includes review of system design, construction, treatment, operation, and monitoring for contaminants. Approximately 1.4 million West Virginians receive water from public systems, so an effective waterborne disease reporting and prevention program is essential for public health protection. The management of microbial, chemical and radiological contaminants in West Virginia's public drinking water systems is accomplished through a continuing partnership between the regulatory, epidemiological and medical communities.

For more information on the state's drinking water program, contact Don Kuntz at 558-2981.

RHI applications being reviewed

Members of the Rural Health Initiative (RHI) Advisory Panel are currently reviewing applications for training sites to be established through the RHI, or Caperton Health Plan. Nineteen health care facilities have submitted applications.

The RHI, passed by the Legislature during a special session in September, calls for $6 million to be used to set up a minimum of six rural health care training sites around the state.

The panel will conduct applicant site visits in late April. They will submit recommendations to the vice chancellor for Health Sciences, who will then present a list of sites to the board of trustees for final approval.

REMINDER

All health care facilities generating more than 50 pounds of infectious medical waste in a one-month period must apply for a permit by **June 8.** Contact the Office of Environmental Health Services at 558-2981 for more information.

Planning A Change?

Hospital-guaranteed and private practice opportunities for board certified/eligible physicians are available in West Virginia and western Pennsylvania in the following specialties.

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WEST VIRGINIA UNIVERSITY HEALTH SCIENCES CENTER

Compiled from material furnished by the West Virginia University Health Sciences Center News Service, Morgantown.

WVU establishes center for rural emergency medicine

The Center for Rural Emergency Medicine (CREM) at WVU began operation March 2.

CREM, the first center in the nation dedicated to studying rural emergency care issues, will help rural communities develop and implement practical solutions to the problems they face in providing high-level emergency care.

The center will concentrate on prehospital and emergency room practices and will work closely with the West Virginia Office of Emergency Medical Services.

CREM is designed to:

- Provide direct aid to the EMS systems of rural West Virginia.
- Provide technical assistance to local communities to improve their services.
- Improve public access to, and understanding of, the EMS system.
- Study the causes of higher incidences of severe patient injury and death as a result of trauma in rural areas; develop practical and economical methods of addressing these problems.
- Improve the effectiveness of EMS providers through educational programs.
- Share information with local, state and federal agencies to assist in policy planning.

Dr. John Prescott, FACEP, medical director of the emergency department at WVU's Ruby Memorial Hospital, is director of CREM, and Bob Acklin, administrator of the emergency department, is interim administrator of CREM.

Cancer screening program to begin

Community health care providers in Calhoun, Wirt, and Ritchie counties will work with cancer specialists from WVU's Mary Babb Randolph Cancer Center to provide breast and cervical cancer screenings to older, low-income women as part of a National Cancer Institute research project.

The four-year, $1.4 million study was announced on February 12 by Senator Robert C. Byrd. Kenneth J. Simon of WVU's Mary Babb Randolph Cancer Center will direct the research, and the project's co-investigators will be Al Lawson, administrator of Calhoun General Hospital; Curtis Dickson and Dr. James LeVos, of the Mid-Ohio Valley Health Department; and Glenn McEndree of the Minnie Hamilton Health Care Center.

Associate VP for rural health named

Hilda R. Heady, administrator of Preston Memorial Hospital, will join the WVU Health Sciences Center as associate vice president for rural health and development beginning April 20.

Heady will be responsible for coordinating WVU's participation in the Rural Health Initiative established by the Legislature last year.

Newsletter features medical want ads

A newsletter to inform medical residents and students in the health professions about opportunities to practice in West Virginia has been published by the WVU School of Medicine, Marshall University School of Medicine, and the West Virginia School of Osteopathic Medicine.

In the publication, *"West Virginia Health Wanted,"* some listings represent positions which hospitals and other provider institutions are actively seeking to fill, while others represent only community needs and possible career opportunities.

For a copy, contact the Office of Planning and Marketing at the WVU Health Sciences Center, 293-7087 or 1-800-WVA-MARS.

Ethics conference scheduled for May 8

"Solving the Health Care Crisis: Does Oregon Have the Answer?" will be the topic of a WVU CME conference Friday, May 8, from 8:30 a.m. to 4 p.m. at the WVU Health Sciences Center.

This fifth annual symposium will examine four of the most current and controversial topics in health ethics: access to care and the design of a just health care system; decision-making when patients (or their surrogates) request life-sustaining treatments which their physicians think are futile; ethical treatment of the elderly in long-term care institutions; and HIV-infected health care professionals.

For more details, call the WVU CME Office at 293-3937 or 1-800-WVA-MARS, or the Center for Health Ethics and Law at 293-7618.

Serial homicide topic of seminar

The primary investigator in the Ted Bundy murder cases was the featured speaker at WVU's seventh annual Medicolegal Investigation of Death Seminar, "Investigation of Serial Homicide," which was held Saturday, April 4, at the WVU Health Sciences Center.

Robert D. Keppel, chief criminal investigator with the Washington State Attorney General's Office in Seattle, discussed the Bundy case and other serial murders.

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MU School Of Medicine News

Compiled from material furnished by the Office of University Relations, Marshall University.

Occupational therapy services now offered in Lincoln County

Through an arrangement with the Lincoln Primary Care Center, Marshall University's occupational therapy program is now providing services in Lincoln County.

A therapist sees patients one day a week both at the clinic and in home visits, according to Elizabeth Devereaux, director of the Division of Occupational Therapy. "We are focusing primarily on participants in the geriatrics program at first, but we will treat patients of all ages," she said. "Marshall plans to expand the program to additional rural sites," she added.

Occupational therapists help people who, because of illness, accident or other health problems, have difficulty with the tasks of daily living. Depending on the problem, therapists may teach special skills, provide adaptive equipment or modify the patient's environment.

"When people's functioning has been impaired for whatever reason, our goal is to allow them to do what they like to do and need to do, whether that is working in an office or hoeing a garden and canning," Devereaux said. "It is a very individualized process."

Marshall's occupational therapy program was established in the early 1980s in response to requests from parents who had to take their children to Cincinnati and Lexington for therapy. The program uses no state funding, providing services primarily through contracts with community agencies.

Currently, Marshall's seven occupational therapists treat hundreds of patients in Cabell and Mason counties. The program also has provided, and hopes to resume soon, services through VOCA centers in Raleigh, Fayette, Kanawha, Nicholas, Mercer and Webster counties.

In addition to meeting community needs, the program has proved to be a valuable asset to Marshall's medical education process, Devereaux said. "We have OTs doing case conferences with medical students, and both the therapists and the students benefit from them. The medical school as a whole works particularly hard to integrate the experiences of medical students with other health professionals because it provides much broader-based care for their future patients."

Devereaux wrote a chapter on community home health care in rural settings for a major reference book in the field, *Willard and Spackman's Occupational Therapy.* She recently had an article on community-based occupational therapy published in the *Journal of Occupational Therapy.*

Professor conducting research on cave fish

The cave fish swimming sightlessly in the lab of a Marshall medical researcher may provide eye-opening insights into how the human brain gradually adapts over time.

Under an $84,000 grant from the National Institutes of Health, Dr. Stephen E. Fish, an associate professor of anatomy and cell biology, is trying to learn how the brains of these once-sighted fish have changed in the centuries since they invaded limestone caves in Mexico.

"If you want to look at major evolutionary changes in the brain, you have a significant problem because brains don't fossilize," Dr. Fish said. "But the cave fish offer an alternative: the ancestors from which they branched off more than 10,000 years ago are still alive."

Since he has both the "before" and the "after," Dr. Fish can learn how the brains of the cave fish changed as they adapted to a world of darkness. Due to the fact that the cave fish have no eyes, Dr. Fish said the vision-related area of the brain might be expected to be dead. Instead, it channels its efforts to other senses, responding to touch and sound.

Dr. Fish is comparing the fish for behavioral differences, particularly the way the blind fish locate objects in their environment compared to how the sighted fish do so in the dark. He also will trace the axons in each group to learn how they differ in processing sensory input.

"By looking at behavior and studying changes in brain connections, we can learn a great deal about how the brain develops and changes," Dr. Fish explained. "Although the study is narrowly focused, it could have broad implications. Any data we generate will fit into that larger picture to help explain how the brain operates. It might even help identify the mechanism by which neurons grow."

Five Huntington surgeons become full-time faculty

The five surgeons of Huntington Surgical Associates are joining the full-time faculty of the Marshall University School of Medicine, Dean Charles H. McKown Jr. has announced.

Dr. David A. Denning, a Huntington surgeon since 1982, is the new chairman of the Department of Surgery. Dr. John T. Walker has been appointed chief of surgery at the Huntington VA Medical Center as part of the cooperative VA/Marshall relationship. In addition, Dr. M. Homer Cummings, Dr. Timothy D. W. Canterbury and Dr. David S. Ratliff will serve as full-time surgical faculty members.

The Huntington Surgical Associates office at 1415 Hal Greer Boulevard will continue to operate as usual.

"These surgeons have provided outstanding teaching for our students and residents over the years, and we are happy that we can add them to our full-time faculty," Dr. McKown said.

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Medical Student News

Editor's Note: *If you would like to contribute an article for this page, please contact Nancy Hill, managing editor, at 925-0342.*

WVU - Morgantown

Approximately two years ago, a group of medical students from both Marshall University and West Virginia University began the process of forming an organization which would represent the medical students of the state. After many successes and setbacks, the West Virginia State Medical Association's Medical Student Section (WVSMA-MSS) has officially been reestablished.

The inaugural meeting took place at the WVSMA headquarters on March 21 and was attended by students from the campuses of WVU - Morgantown; WVU - Charleston; and Marshall University. Also participating were WVSMA President Dr. Constantino Amores; WVSMA Vice President Dr. James Comerci; WVSMA Executive Director George Rider; WVSMA Associate Executive Director Thom Stevens; WVSMA Membership Coordinator Donna Webb; and AMA Policy Analyst for Medical Student Services Sharon Swan.

The purpose of the WVSMA-MSS is to promote the science and art of medicine; to promote the general welfare of medical students, residents and physicians; to promote active improvement in medical education; and to involve its members in the social, ethical and legal issues of the profession of medicine on an international, national, state and local level.

This framework and many other aspects of the WVSMA-MSS were initially set forth by the students who first organized in 1990, and now serve as our guiding principles as we begin to respond to the issues at hand. The constitution outlines membership, amendments to the constitution, yearly election of officers, operation of the component student medical societies, finances, and participation at the various state and national meetings.

The objectives for this year are to promote membership in the WVSMA-MSS and participation in the local campus societies, with the overall goal of becoming a unified, functioning body representing the medical students of the state of West Virginia. Through this organization, we can begin as students to be "pro-active" instead of reactive to the inevitable and rapid changes taking place in health care today, and focus our efforts to ensure quality for the future.

Kevin Kaufman, MSII
President, WVSMA-MSS

WVU - Charleston

At their March 21 meeting, the WVSMA-MSS executive committee drafted two resolutions for consideration.

The first resolution concerns membership of students from the West Virginia Osteopathic School in the WVSMA-MSS. Osteopathic students represent nearly one third of the medical students in West Virginia and having them as members of this organization would help make the WVSMA-MSS a strong and unified voice for the medical students of this state. Since osteopathic students are currently eligible to become members of the medical student section of the AMA, it is sensible to include them on the state level as well.

The second resolution concerns obtaining funds for a representative from the WVSMA-MSS to attend the WVSMA and AMA annual meetings. It is important to have a representative from our medical student section in attendance at these meetings to represent the students of West Virginia. This second resolution calls for the WVSMA to provide funds in the event that the WVSMA-MSS is unable to finance the trip.

If you have any comments about these resolutions, or if you have a concern that you would like to have addressed, feel free to contact the WVSMA-MSS representatives on your campus.

Dan Stickler, MSIII
Secretary/Treasurer, WVSMA-MSS

Marshall University

We are all concerned with the future of medicine and our places in that future. Many of our mentors tell us about "the good ole days" and project a less favorable shadow on the state of medicine today and in the future.

In some ways, they are correct. It is no longer acceptable to merely instruct our patients on what they are to do and expect them to blindly follow our recommendations without thought or understanding. Patients now expect to be an active participant in their health care rather than the passive moldable patient of the past.

As a result of these new expectations, individuals without medical training are clamoring to help determine the future of medicine. Hence, it is more important today than it ever has been for physicians to unite so their collective voice is heard. If do not unite, we will be told how, when and where to practice by lawyers and other lay persons.

Since the future necessitates our unified participation, it has become an important part of our medical education to learn to be involved in organized medicine. As medical students, we also have special needs that only we can effectively address.

With the framework of the reorganized WVSMA-MSS now in place, it is the responsibility of medical students to become a force in organized medicine locally, statewide and nationally. The WVSMA offers dual membership in WVSMA-MSS and the AMA for the reduced rate of $10 per year.

If you are interested in joining us to help make West Virginia a better place for physicians to practice, please see a local chapter officer at your school, a state officer (Kevin Kaufman in Morgantown, Dan Stickler in Charleston, or myself) or call Donna Webb, WVSMA membership coordinator, at 1-800-257-4747.

If we do not take the opportunity to effect the future, it will be determined by people who do not understand medicine from our perspective.

Richard L. Wilson Jr., MSIII
Vice President, WVSMA-MSS

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AIR FORCE

New Members

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P.O. Box 1046
Lewisburg, WV 24901

Bruce Gorby, D.O.
101 Stoneybrooke Rd.
Clarksburg, WV 26301

Jeffrey G. Priddy, M.D.
1400 6th Avenue
Huntington, WV 25701

Michael P. Varley, M.D.
Retinal Consultants, Inc.
415 Morris Street
Charleston, WV 25301

Nicholas Zarilla, M.D.
2915 3rd Avenue
Huntington, WV 25702

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We wish to thank the following individuals for their recent contributions to WESPAC:

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Edward L. Pinney
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Harvey D. Reisenweber
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Peter Ladewig, M.D.

Dr. Peter Ladewig, one of the state's first forensic doctors, died March 11 in CAMC General Division, after a long illness.

Dr. Ladewig, 82, became the chairman of the Department of Pathology at Charleston General Hospital in 1958. He was well known in courts and police departments for his work in criminal and civil cases.

A native of Berlin, Dr. Ladewig received his medical degree from the University of Berlin. He interned at the Konigin Elizabeth Hospital in Berlin and did postgraduate work at the University of Berlin and the University of Istanbul in Turkey. He came to the United States in 1947 and served on the visiting faculty at the Medical College of Virginia and later was a professor emeritus at the WVU School of Medicine.

In addition to his membership in the WVSMA, Dr. Ladewig was also a member of the College of American Pathologists, the International Academy of Pathologists, the American Society of Clinical Pathologists and the West Virginia Association of Pathologists. He was a fellow in the American Academy of Forensic Sciences.

Surviving are his wife, Sonia A. Ladewig; son, Kim Peter of Charleston; brothers, the Rev. Paul Lawrie of Sheffield, England, and Helmut Ladewig of Buenos Aires, Argentina; and one stepgrandson.

Page H. Seekford, M.D.

Dr. Page H. Seekford, 78, died March 22, after a long illness.

Dr. Seekford was well respected during his long tenure as the former Kanawha-Charleston health director. Under his leadership, the first county birth control clinics were established. He was also successful in making restaurant inspection scores available to the public, as well as pioneering air pollution testing and immunization drives.

Dr. Seekford received both his bachelor's degree and his medical degree from Northwestern University. He interned at the U.S. Marine Hospital in Baltimore and Chicago and completed a residency at the Washington County Health Department in Chicago. Dr. Seekford did postgraduate work at the Harvard University School of Public Health.

After moving to West Virginia in the early 50s, Dr. Seekford went into private practice in Boone County until he became health director in 1958.

Surviving is his wife, Louise Wiegel Seekford.

Marion

Congressman Alan Mollohan addressed the society at their March meeting about health care financing, generally outlining the different proposals now being considered in Washington, D.C..

In addition to addressing health care financing issues, Mollohan emphasized the importance of physicians getting involved in the political process and community affairs. A lively question and answer period following his speech.

The society also made plans for a joint meeting of the Marion County Medical Society and the Marion County Bar Association in May. Coach Don Nehlen will be the guest speaker.

McDowell

At the March meeting, a presentation on Cardizem and Nicoderm was given by Sarah Justice, of Marion Merrell Dow Inc.

Dr. Christian G. Anderson's application for membership was unanimously accepted and the members voted to recognize Dr. Kao's retired status. An invitation was also extended for members to attend the groundbreaking for the Tug River Health Association's Northfork Health Center, and a card of thanks was read from the Literacy Volunteers of America for the society's donation.

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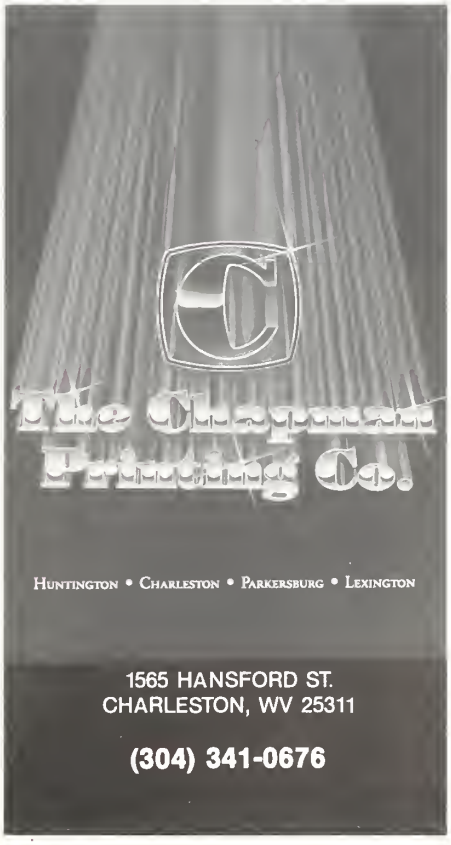

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†Constipation, which is easily managed in most patients, is the most commonly reported side effect of Calan SR.

‡Verapamil should be administered cautiously to patients with impaired renal function.

References: 1. Data on file, Searle. 2. Edmonds D, Würth JP, Baumgart P, et al. Twenty-four-hour monitoring of blood pressure during calcium antagonist therapy. In: Fleckenstein A, Laragh SH, eds. *Hypertension—the Next Decade: Verapamil in Focus*. New York, NY: Churchill Livingstone; 1987:94-100. 3. Midtbø KA. Effects of long-term verapamil therapy on serum lipids and other metabolic parameters. *Am J Cardiol*. 1990;66:13I-15I. 4. Fagher B, Henningsen N, Hulthén L, et al. Antihypertensive and renal effects of enalapril and slow-release verapamil in essential hypertension. *Eur J Clin Pharmacol*. 1990;39(suppl 1):S41-S43. 5. Schmieder RE, Messerli FH, Garavaglia GE, et al. Cardiovascular effects of verapamil in patients with essential hypertension. *Circulation*. 1987;75:1030-1036. 6. Midtbø K, Lauve O, Hals O. No metabolic side effects of long-term treatment with verapamil in hypertension. *Angiology*. 1988;39:102S-1029.

BRIEF SUMMARY

Contraindications: Severe LV dysfunction (see *Warnings*), hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no pacemaker is present), 2nd- or 3rd-degree AV block (if no pacemaker is present), atrial flutter/fibrillation with an accessory bypass tract (eg, WPW or LGL syndromes), hypersensitivity to verapamil.

Warnings: Verapamil should be avoided in patients with severe LV dysfunction (eg, ejection fraction < 30%) or moderate to severe symptoms of cardiac failure and in patients with any degree of ventricular dysfunction if they are receiving a beta-blocker. Control milder heart failure with optimum digitalization and/or diuretics before Calan SR is used. Verapamil may occasionally produce hypotension. Elevations of liver enzymes have been reported. Several cases have been demonstrated to be produced by verapamil. Periodic monitoring of liver function in patients on verapamil is prudent. Some patients with paroxysmal and/or chronic atrial flutter/fibrillation and an accessory AV pathway (eg, WPW or LGL syndromes) have developed an increased antegrade conduction across the accessory pathway bypassing the AV node, producing a very rapid ventricular response or ventricular fibrillation after receiving I.V. verapamil (or digitalis). Because of this risk, oral verapamil is contraindicated in such patients. AV block may occur (2nd- and 3rd-degree, 0.8%). Development of marked 1st-degree block or progression to 2nd- or 3rd-degree block requires reduction in dosage or, rarely, discontinuation and institution of appropriate therapy. Sinus bradycardia, 2nd-degree AV block, sinus arrest, pulmonary edema and/or severe hypotension were seen in some critically ill patients with hypertrophic cardiomyopathy who were treated with verapamil.

Precautions: Verapamil should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdosage. Verapamil may decrease neuromuscular transmission in patients with Duchenne's muscular dystrophy and may prolong recovery from the neuromuscular blocking agent vecuronium. It may be necessary to decrease verapamil dosage in patients with attenuated neuromuscular transmission. Combined therapy with beta-adrenergic blockers and verapamil may result in additive negative effects on heart rate, atrioventricular conduction and/or cardiac contractility; there have been reports of excessive bradycardia and AV block, including complete heart block. The risks of such combined therapy may outweigh the benefits. The combination should be used only with caution and close monitoring. Decreased metoprolol and propranolol clearance may occur when either drug is administered concomitantly with verapamil. A variable effect has been seen with combined use of atenolol. Chronic verapamil treatment can increase serum digoxin levels by 50% to 75% during the first week of therapy, which can result in digitalis toxicity. In patients with hepatic cirrhosis, verapamil may reduce total body clearance and extrarenal clearance of digitoxin. The digoxin dose should be reduced when verapamil is given, and the patient carefully monitored. Verapamil will usually have an additive effect in patients receiving blood-pressure-lowering agents. Disopyramide should not be given within 48 hours before or 24 hours after verapamil administration. Concomitant use of flecainide and verapamil may have additive effects on myocardial contractility, AV conduction, and repolarization. Combined verapamil and quinidine therapy in patients with hypertrophic cardiomyopathy should be avoided, since significant hypotension may result. Concomitant use of lithium and verapamil may result in a lowering of serum lithium levels or increased sensitivity to lithium. Patients receiving both drugs must be monitored carefully. Verapamil may increase carbamazepine concentrations during combined use. Rifampin may reduce verapamil bioavailability. Phenobarbital may increase verapamil clearance. Verapamil may increase serum levels of cyclosporin. Verapamil may inhibit the clearance and increase the plasma levels of theophylline. Concomitant use of inhalation anesthetics and calcium antagonists needs careful titration to avoid excessive cardiovascular depression. Verapamil may potentiate the activity of neuromuscular blocking agents (curare-like and depolarizing); dosage reduction may be required. There was no evidence of a carcinogenic potential of verapamil administered to rats for 2 years. A study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. Pregnancy Category C. There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. Verapamil is excreted in breast milk; therefore, nursing should be discontinued during verapamil use.

Adverse Reactions: Constipation (7.3%), dizziness (3.3%), nausea (2.7%), hypotension (2.5%), headache (2.2%), edema (1.9%), CHF, pulmonary edema (1.8%), fatigue (1.7%), dyspnea (1.4%), bradycardia: HR < 50/min (1.4%), AV block: total 1°,2°,3° (1.2%), 2° and 3° (0.8%), rash (1.2%), flushing (0.6%), elevated liver enzymes, reversible non-obstructive paralytic ileus. The following reactions, reported in 1.0% or less of patients, occurred under conditions where a causal relationship is uncertain: angina pectoris, atrioventricular dissociation, chest pain, claudication, myocardial infarction, palpitations, purpura (vasculitis), syncope, diarrhea, dry mouth, gastrointestinal distress, gingival hyperplasia, ecchymosis or bruising, cerebrovascular accident, confusion, equilibrium disorders, insomnia, muscle cramps, paresthesia, psychotic symptoms, shakiness, somnolence, arthralgia and rash, exanthema, hair loss, hyperkeratosis, macules, sweating, urticaria, Stevens-Johnson syndrome, erythema multiforme, blurred vision, gynecomastia, galactorrhea/hyperprolactinemia, increased urination, spotty menstruation, impotence.

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West Virginia Medical JOURNAL

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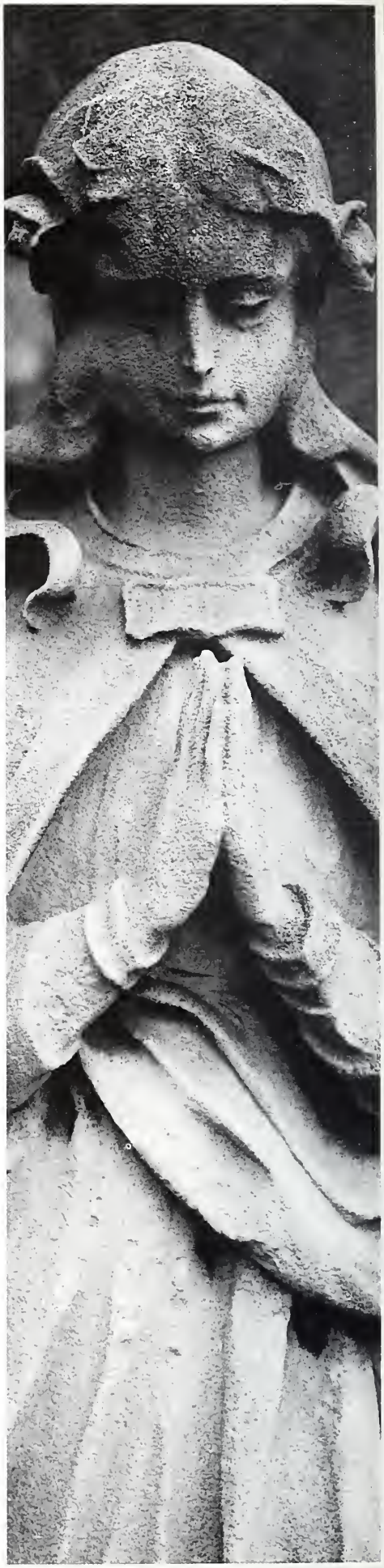

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Front Cover

The violets in full bloom at Cranberry Glades in Pocahontas County. *Photo courtesy of Scott Durham of Pineville.*

The good old days of medicine

Editor's Note: *We wish to thank Dr. Lemoyne Coffield, a family practitioner in New Martinsville, for submitting the following photographs of his father, Dr. Albert Lee Coffield, who practiced medicine in Marshall and Wetzel counties from 1911 until shortly before his death in 1936. These pictures attest to the rigors of practicing medicine in rural West Virginia during this period of history.*

(Right) Dr. Coffield entered the practice of medicine at Lynn Camp in Marshall County in 1911 and after a few years moved to Silver Hill in Wetzel County, where he often made house calls on his trusty horse, Ben.

Dr. Coffield traveled via train to Pittsburgh in the 1920s to pick up his brand new Model T Ford. After an hour or so of instruction in the function and uses of the various items in the tool box, he graduated to a few turns driving around a large vacant field and proudly drove all the way to his home in Wetzel County where this photo was taken.

Never known to refuse a house call, Dr. Coffield is shown here at his patient Jake Yoho's residence beside his 1933 Ford Coupe. Dr. Coffield often went on long trips to care for people in isolated communities without thought of financial remuneration, even though his fellow physicians told him to "take it easy" because he suffered from angina pectoris.

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INDICATIONS AND USAGE

ACCUPRIL is indicated for the treatment of hypertension. It may be used alone or in combination with thiazide diuretics.

In using ACCUPRIL, consideration should be given to the fact that another angiotensin-converting enzyme (ACE) inhibitor, captopril, has caused agranulocytosis, particularly in patients with renal impairment or collagen vascular disease. Available data are insufficient to show that ACCUPRIL does not have a similar risk (see WARNINGS).

CONTRAINDICATIONS

ACCUPRIL is contraindicated in patients who are hypersensitive to this product and in patients with a history of angioedema related to previous treatment with an ACE inhibitor.

WARNINGS

Angioedema: Angioedema of the face, extremities, lips, tongue, glottis, and larynx has been reported in patients treated with ACE inhibitors and has been seen in 0.1% of patients receiving ACCUPRIL. Angioedema associated with laryngeal edema can be fatal. If laryngeal stridor or angioedema of the face, tongue, or glottis occurs, treatment with ACCUPRIL should be discontinued immediately, the patient treated in accordance with accepted medical care, and carefully observed until the swelling disappears. In instances where swelling is confined to the face and lips, the condition generally resolves without treatment; antihistamines may be useful in relieving symptoms.

Where there is involvement of the tongue, glottis, or larynx likely to cause airway obstruction, emergency therapy including, but not limited to, subcutaneous epinephrine solution 1:1000 (0.3 to 0.5 mL) should be promptly administered (see ADVERSE REACTIONS).

Hypotension: Symptomatic hypotension was rarely seen in uncomplicated hypertensive patients treated with ACCUPRIL but, as with other ACE inhibitors, it is a possible consequence of therapy in salt/volume depleted patients, such as those previously treated with diuretics or dietary salt restriction or who are on dialysis (see PRECAUTIONS, DRUG INTERACTIONS, and ADVERSE REACTIONS). In controlled studies, syncope was observed in 0.4% of patients (N = 3203); this incidence was similar to that observed for captopril (1%) and enalapril (0.8%).

In patients with concomitant congestive heart failure, with or without associated renal insufficiency, ACE inhibitor therapy may cause excessive hypotension, which may be associated with oliguria or azotemia and, rarely, with acute renal failure and death. In such patients, ACCUPRIL therapy should be started at the recommended dose under close medical supervision. These patients should be followed closely for the first 2 weeks of treatment and whenever the dosage of antihypertensive medication is increased (see DOSAGE AND ADMINISTRATION).

If symptomatic hypotension occurs, the patient should be placed in the supine position and, if necessary, normal saline may be administered intravenously. A transient hypotensive response is not a contraindication to further doses; however, lower doses of ACCUPRIL or reduced concomitant diuretic therapy should be considered.

Neutropenia/Agranulocytosis: Another ACE inhibitor, captopril, has been shown to cause agranulocytosis and bone marrow depression rarely in patients with uncomplicated hypertension, but more frequently in patients with renal impairment, especially if they also have a collagen vascular disease such as systemic lupus erythematosus or scleroderma. Agranulocytosis did occur during ACCUPRIL treatment in one patient with a history of neutropenia during previous captopril therapy. Available data from clinical trials of ACCUPRIL are insufficient to show that, in patients without prior reactions to other ACE inhibitors, ACCUPRIL does not cause agranulocytosis at similar rates. As with other ACE inhibitors, periodic monitoring of white blood cell counts in patients with collagen vascular disease and/or renal disease should be considered.

Fetal/Neonatal morbidity and mortality: ACE inhibitors, including ACCUPRIL, can cause fetal and neonatal morbidity and mortality when administered to pregnant women.

When ACE inhibitors have been used during the second and third trimesters of pregnancy, there have been reports of hypotension, renal failure, skull hypoplasia, and death. Oligohydramnios has also been reported, presumably resulting from decreased fetal renal function; oligohydramnios has been associated with fetal limb contractures, craniofacial deformities, hypoplastic lung development, and intrauterine growth retardation.

Prematurity and patent ductus arteriosus have been reported, although it is not clear whether these occurrences were due to the ACE-inhibitor exposure or to the mother's underlying disease. It is not known whether exposure limited to the first trimester can adversely affect fetal outcome.

A patient who becomes pregnant while taking ACE inhibitors, or who takes ACE inhibitors when already pregnant, should be apprised of the potential hazard to her fetus. If she continues to receive ACE inhibitors during the second or third trimester of pregnancy, frequent ultrasound examinations should be performed to look for oligohydramnios. When oligohydramnios is found, ACE inhibitors should generally be discontinued.

Infants with histories of in utero exposure to ACE inhibitors should be closely observed for hypotension, oliguria, and hyperkalemia. If oliguria occurs, attention should be directed toward support of blood pressure and renal perfusion. Hemodialysis and peritoneal dialysis have little effect on the elimination of quinapril and quinaprilat.

No fetotoxic or teratogenic effects were observed in rats at quinapril doses as high as 300 mg/kg/day (180 and 30 times the maximum daily human dose when based on mg/kg and mg/m^2, respectively), despite maternal toxicity at 150 mg/kg/day. Tested later in gestation and during lactation, reduced offspring body weight was seen at ≥25 mg/kg/day, and changes in renal histology (juxtaglomerular cell hypertrophy, tubular/pelvic dilation, glomerulosclerosis) were observed both in dams and offspring treated with 150 mg/kg/day. Quinapril was not teratogenic in the rabbit; however, as noted with other ACE inhibitors, maternal toxicity and embryotoxicity were seen in some rabbits at quinapril doses as low as 0.5 mg/kg/day (one time the recommended human dose) and 1.0 mg/kg/day, respectively.

PRECAUTIONS

General

Impaired renal function: As a consequence of inhibiting the renin-angiotensin-aldosterone system, changes in renal function may be anticipated in susceptible individuals. In patients with severe heart failure whose renal function may depend on the activity of the renin-angiotensin-aldosterone system, treatment with ACE inhibitors, including ACCUPRIL, may be associated with oliguria and/or progressive azotemia and rarely acute renal failure and/or death.

In clinical studies in hypertensive patients with unilateral or bilateral renal artery stenosis, increases in blood urea nitrogen and serum creatinine have been observed in some patients following ACE inhibitor therapy. These increases were almost always reversible upon discontinuation of the ACE inhibitor and/or diuretic therapy. In such patients, renal function should be monitored during the first few weeks of therapy.

Some hypertensive patients with no apparent preexisting renal vascular disease have developed increases in blood urea and serum creatinine, usually minor and transient, especially when ACCUPRIL has been given concomitantly with a diuretic. This is more likely to occur in patients with preexisting renal impairment. Dosage reduction and/or discontinuation of any diuretic and/or ACCUPRIL may be required.

Evaluation of hypertensive patients should always include assessment of renal function (see DOSAGE AND ADMINISTRATION).

Hyperkalemia and potassium-sparing diuretics: In clinical trials, hyperkalemia (serum potassium ≥5.8 mmol/L) occurred in approximately 2% of patients receiving ACCUPRIL. In most cases, elevated serum potassium levels were isolated values which resolved despite continued therapy. Less than 0.1% of patients discontinued therapy due to hyperkalemia. Risk factors for the development of hyperkalemia include renal insufficiency, diabetes mellitus, and the concomitant use of potassium-sparing diuretics, potassium supplements, and/or potassium-containing salt substitutes, which should be used cautiously, if at all, with ACCUPRIL (see PRECAUTIONS, Drug Interactions).

Surgery/anesthesia: In patients undergoing major surgery or during anesthesia with agents that produce hypotension, ACCUPRIL will block angiotensin II formation secondary to compensatory renin release. If hypotension occurs and is considered to be due to this mechanism, it can be corrected by volume expansion.

Information for Patients

Angioedema: Angioedema, including laryngeal edema, can occur with treatment with ACE inhibitors, especially following the first dose. Patients should be so advised and told to report immediately any signs or symptoms suggesting angioedema (swelling of face, extremities, eyes, lips, tongue, difficulty in swallowing or breathing) and to stop taking the drug until they have consulted with their physician (see WARNINGS).

Symptomatic hypotension: Patients should be cautioned that lightheadedness can occur, especially during the first few days of ACCUPRIL therapy, and that it should be reported to a physician. If actual syncope occurs, patients should be told to not take the drug until they have consulted with their physician (see WARNINGS).

All patients should be cautioned that inadequate fluid intake or excessive perspiration, diarrhea, or vomiting can lead to an excessive fall in blood pressure because of reduction in fluid volume, with the same consequences of lightheadedness and possible syncope.

Patients planning to undergo any surgery and/or anesthesia should be told to inform their physician that they are taking an ACE inhibitor.

Hyperkalemia: Patients should be told not to use potassium supplements or salt substitutes containing potassium without consulting their physician (see PRECAUTIONS).

Accupril® (Quinapril Hydrochloride Tablets)

Neutropenia: Patients should be told to report promptly any indication of infection (eg, sore throat, fever) which could be a sign of neutropenia.

NOTE: As with many other drugs, certain advice to patients being treated with ACCUPRIL is warranted. This information is intended to aid in the safe and effective use of this medication. It is not a disclosure of all possible adverse or intended effects.

Drug Interactions

Concomitant diuretic therapy: As with other ACE inhibitors, patients on diuretics, especially those on recently instituted diuretic therapy, may occasionally experience an excessive reduction of blood pressure after initiation of therapy with ACCUPRIL. The possibility of hypotensive effects with ACCUPRIL may be minimized by either discontinuing the diuretic or cautiously increasing salt intake prior to initiation of treatment with ACCUPRIL. If it is not possible to discontinue the diuretic, the starting dose of quinapril should be reduced (see DOSAGE AND ADMINISTRATION).

Agents increasing serum potassium: Quinapril can attenuate potassium loss caused by thiazide diuretics and increase serum potassium when used alone. If concomitant therapy of ACCUPRIL with potassium-sparing diuretics (eg, spironolactone, triamterene, or amiloride), potassium supplements, or potassium-containing salt substitutes is indicated, they should be used with caution along with appropriate monitoring of serum potassium (see PRECAUTIONS).

Tetracycline and other drugs that interact with magnesium: Simultaneous administration of tetracycline with ACCUPRIL reduced the absorption of tetracycline by approximately 28% to 37%, possibly due to the high magnesium content in ACCUPRIL tablets. This interaction should be considered if coprescribing ACCUPRIL and tetracycline or other drugs that interact with magnesium.

Lithium: Increased serum lithium levels and symptoms of lithium toxicity have been reported in patients receiving concomitant lithium and ACE inhibitor therapy. These drugs should be co-administered with caution, and frequent monitoring of serum lithium levels is recommended. If a diuretic is also used, it may increase the risk of lithium toxicity.

Other agents: Drug interaction studies of ACCUPRIL with other agents showed:

- Multiple dose therapy with propranolol or cimetidine has no effect on the pharmacokinetics of single doses of ACCUPRIL.
- The anticoagulant effect of a single dose of warfarin (measured by prothrombin time) was not significantly changed by quinapril coadministration twice-daily.
- ACCUPRIL treatment did not affect the pharmacokinetics of digoxin.
- No pharmacokinetic interaction was observed when single doses of ACCUPRIL and hydrochlorothiazide were administered concomitantly.

Carcinogenesis, Mutagenesis, Impairment of Fertility

Quinapril hydrochloride was not carcinogenic in mice or rats when given in doses up to 75 or 100 mg/kg/day (50 to 60 times the maximum human daily dose, respectively, on a mg/kg basis and 3.8 to 10 times the maximum human daily dose when based on a mg/m^2 basis) for 104 weeks. Female rats given the highest dose level had an increased incidence of mesenteric lymph node hemangiomas and skin/subcutaneous lipomas. Neither quinapril nor quinaprilat were mutagenic in the Ames bacterial assay with or without metabolic activation. Quinapril was also negative in the following genetic toxicology studies: *in vitro* mammalian cell point mutation, sister chromatid exchange in cultured mammalian cells, micronucleus test with mice, *in vitro chromosome* aberration with V79 cultured lung cells, and in an *in vivo* cytogenetic study with rat bone marrow. There were no adverse effects on fertility or reproduction in rats at doses up to 100 mg/kg/day (60 and 10 times the maximum daily human dose when based on mg/kg and mg/m^2, respectively).

Pregnancy

Pregnancy Category D: See WARNINGS, Fetal/Neonatal morbidity and mortality.

Nursing Mothers

It is not known if quinapril or its metabolites are secreted in human milk. Quinapril is secreted to a limited extent, however, in milk of lactating rats (5% or less of the plasma drug concentration was found in rat milk). Because many drugs are secreted in human milk, caution should be exercised when ACCUPRIL is given to a nursing mother.

Geriatric Use

Elderly patients exhibited increased area under the plasma concentration time curve (AUC) and peak levels for quinaprilat compared to values observed in younger patients; this appeared to relate to decreased renal function rather than to age itself. In controlled and uncontrolled studies of ACCUPRIL where 918 (21%) patients were 65 years and older, no overall differences in effectiveness or safety were observed between older and younger patients. However, greater sensitivity of some older individual patients cannot be ruled out.

Pediatric Use

The safety and effectiveness of ACCUPRIL in children have not been established.

ADVERSE REACTIONS

ACCUPRIL has been evaluated for safety in 4960 subjects and patients. Of these, 3203 patients, including 655 elderly patients, participated in controlled clinical trials. ACCUPRIL has been evaluated for long-term safety in over 1400 patients treated for 1 year or more.

Adverse experiences were usually mild and transient.

Discontinuation of therapy because of adverse events was required in 4.7% of patients treated with ACCUPRIL in placebo-controlled hypertension trials.

Adverse experiences probably or possibly related to therapy or of unknown relationship to therapy occurring in 1% or more of the 1563 patients in placebo-controlled hypertension trials who were treated with ACCUPRIL are shown below.

Adverse Events in Placebo-Controlled Trials

	ACCUPRIL (N = 1563) Incidence (Discontinuance)	Placebo (N = 579) Incidence (Discontinuance)
Headache	5.6 (0.7)	10.9 (0.7)
Dizziness	3.9 (0.8)	2.6 (0.2)
Fatigue	2.6 (0.3)	1.0
Coughing	2.0 (0.5)	0.0
Nausea/Vomiting	1.4 (0.3)	1.9 (0.2)
Abdominal Pain	1.0 (0.2)	0.7

Clinical adverse experiences probably or possibly related, or of uncertain relationship to therapy, occurring in 0.5% to 1.0% (except as noted) of the patients treated with ACCUPRIL (with or without concomitant diuretic) in controlled or uncontrolled trials (N = 4397) and less frequent, clinically significant events seen in clinical trials or post-marketing experience (the rarer events are in italics) include (listed by body system):

General: back pain, malaise

Cardiovascular: palpitation, vasodilation, tachycardia, *heart failure, hyperkalemia, myocardial infarction, cerebrovascular accident, hypertensive crisis, angina pectoris, orthostatic hypotension, cardiac rhythm disturbances*

Gastrointestinal: dry mouth or throat, constipation, *gastrointestinal hemorrhage, pancreatitis, abnormal liver function tests*

Nervous/Psychiatric: somnolence, vertigo, syncope, *nervousness, depression*

Integumentary: increased sweating, pruritus, *exfoliative dermatitis, photosensitivity reaction*

Urogenital: *acute renal failure*

Other: amblyopia, pharyngitis, sinusitis, bronchitis, *agranulocytosis, thrombocytopenia*

Angioedema: angioedema has been reported in patients receiving ACCUPRIL (0.1%). Angioedema associated with laryngeal edema may be fatal. If angioedema of the face, extremities, lips, tongue, glottis, and/or larynx occurs, treatment with ACCUPRIL should be discontinued and appropriate therapy instituted immediately. (See WARNINGS.)

Clinical Laboratory Test Findings

Hematology: (See WARNINGS)

Hyperkalemia: (See PRECAUTIONS)

Creatinine and blood urea nitrogen: Increases (>1.25 times the upper limit of normal) in serum creatinine and blood urea nitrogen were observed in 2% and 2%, respectively, of patients treated with ACCUPRIL alone. Increases are more likely to occur in patients receiving concomitant diuretic therapy than in those on ACCUPRIL alone. These increases often remit on continued therapy.

* In some patients, the antihypertensive effect may diminish toward the end of the once-daily dosing interval. In such patients, an increase in dosage or twice-daily administration may be warranted.

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Diagnosing giant cell temporal arteritis

ALI F. ABURAHMA, M.D.
Professor of Surgery and Chief of Vascular Surgery, WVU Health Science Center/CAMC, Charleston

TODD A. WITSBERGER, M.D.
Chief Surgical Resident, West Virginia University Health Sciences Center/CAMC, Charleston

Abstract

Arteritis is a complex and totally underestimated clinical entity that may present in several ways. Due to the diversity of clinical features and the frequent overlapping of clinical syndromes, many different classifications are available for arteritides, but the simplest classification for the practicing physician is the broad division of arteritis into giant cell arteritis and non-giant cell arteritis.

Giant cell arteritis encompasses two distinct clinical entities that are pathologically indistinguishable from each other; but both involve arteritis of median and large-sized arteries characterized by an infiltration of giant cells. These include temporal arteritis and Takayasu's arteritis.

The non-giant cell arteritis encompasses a greater variety of uncommon diseases that are often associated with other systemic processes such as systemic lupus eruythematosus or periarteritis nodosa, and it generally results in ischemic organ dysfunction that is amenable only to medical treatment. Less commonly, however, non-giant cell arteritis may become manifested as acute arterial occlusion caused by circulating anticoagulants, abdominal apoplexy as intra-abdominal bleeding from rupture of micro aneurysms of artery branches, gastrointestinal bleeding from local necrosis of the gastrointestinal tract, or deep-vein thrombosis secondary to hypercoagulable states.

Although temporal arteritis has generated a voluminous body of literature, its precise etiology remains elusive. This study summarizes our experience in 15 cases of temporal arteritis and one case is presented to increase knowledge about this disease entity.

Patient population and results

All patients discharged from the Memorial Division of the Charleston Area Medical Center during a recent three-year period with a clinical diagnosis of temporal arteritis were reviewed. Special attention was given to their clinical presentation upon admission, the results of the temporal artery biopsy, and whether they were treated with prednisone.

This study included 15 patients, eight women and seven men, with a mean age of 71. Four patients were admitted with an initial diagnosis of polymyalgia rheumatica, six with severe headaches and/or non-specific symptoms, two with ischemic symptoms of limbs, one with osteomyelitis of limb, one with CVA, and one with syncope. Thirteen patients had temporal artery biopsies, nine of which were positive for giant cell arteritis and the diagnosis was not conclusive in four. Two patients refused biopsies. All nine patients with a positive temporal artery biopsy were treated with prednisone, as were the three patients with negative biopsies. Table 1 summarizes these 15 patients.

Case presentation

A 64-year-old white female typist's symptoms began in November 1989, with malaise, a low-grade fever, night sweats, and anorexia. A severe constant headache had persisted for nearly a year. In May 1990, she developed severe left arm claudication on minimal exertion. Her symptoms decreased with prednisone; however her claudication was still disabling. Her past medical and surgical history was irrelevant.

Upon physical examination, her blood pressure was 167/99 with otherwise normal vital signs. There were left supraclavicular and left carotid bruits with an absent left radial pulse. Mild left temporal and supraclavicular tenderness was noted. The remainder of the examination was unremarkable. The non-invasive work-up was negative including her ANA and RA screen. Her sedimentation rate, however, was somewhat elevated with a range between 28 and 40 on several occasions.

An initial diagnosis of giant cell arteritis (temporal arteritis) was made. Her arteriogram showed a moderate long segment stenosis of the right subclavian artery distal to the origin of the right vertebral artery. Both internal carotid arteries were normal. There was a long segment of marked stenosis in the left subclavian artery which extended into the left axillary artery with short segment occlusion in the mid-portion of the axillary artery. There was mild short segment stenosis at the origin of the celiac artery with a moderate stenosis of the proximal right renal artery and mild to moderate stenosis of the left renal artery (Figure la-ld).

Due to her disabling symptoms, she eventually underwent a left carotid to left proximal brachial artery bypass using a reverse saphenous vein with left axillary artery biopsy. The biopsy confirmed the presence of giant cell arteritis (Figure 2a-2c). After the operation, she was maintained

Table 1
Cases with a Clinical Diagnosis of Temporal Arteritis

Patients' Initials	Age	Sex	Clinical Presentation (on admission)	Temporal Artery Bx Results	Cortisone Therapy
L.G.	70	F	severe headache & non-specific symptoms	positive	prednisone
W.C.	72	M	osteomyelitis of limb	positive	prednisone
A.T.	75	F	polymyalgia rheumatica	negative	prednisone
J.T.	84	M	polymyalgia rheumatica	positive	prednisone
A.S.	75	F	non-healing ulcer - limb	positive	prednisone
R.K.	76	M	polymyalgia rheumatica	negative	none
E.J.	78	F	severe headache & non-specific symptoms	positive	prednisone
L.F.	64	F	disabling claudication left arm	positive	prednisone & carotid-brachial artery bypass
R.G.	68	M	non-specific symptoms	positive	prednisone
R.E.	59	M	severe headache	refused bx	prednisone
E.D.	68	M	severe headache & non-specific symptoms	positive	prednisone
M.D.	76	F	cerebrovascular accident	negative	none
W.D.	55	M	syncope	negative	none
G.B.	69	F	non-specific symptoms	positive	prednisone
A.A.	80	F	polymyalgia rheumatica	refused bx	prednisone

on prednisone. Her postoperative course was uneventful and a left radial pulse was present, however, it was still diminished. She was continued on prednisone therapy and followed by a rheumatologist. At her last follow-up in September 1991, she had a good brachial pulse with a patent graft and an adequate left radial pulse. Her symptoms were better and she was still on prednisone therapy.

Discussion

The modern knowledge of temporal arteritis dates from a report of two cases in 1932 (1). In reality, however, the syndrome was first described much earlier.

The oldest report on record is a brief description suggestive of temporal arteritis written between 940 A.D.and 1010 A.D. by the ophthalmologist Ali Ibn Isa from Baghdad, which was not translated into English until 1936. In 1890, a patient with inflamed and swollen temporal arteritis was described, and in a 1930 paper on intracranial aneurysms, a patient was reported with extremely severe temporal pain that developed after several weeks of a flu-like syndrome.

The clinical characteristics and histology of temporal arteritis were first fully described in 1934 and 1936 by Horton. The first report of

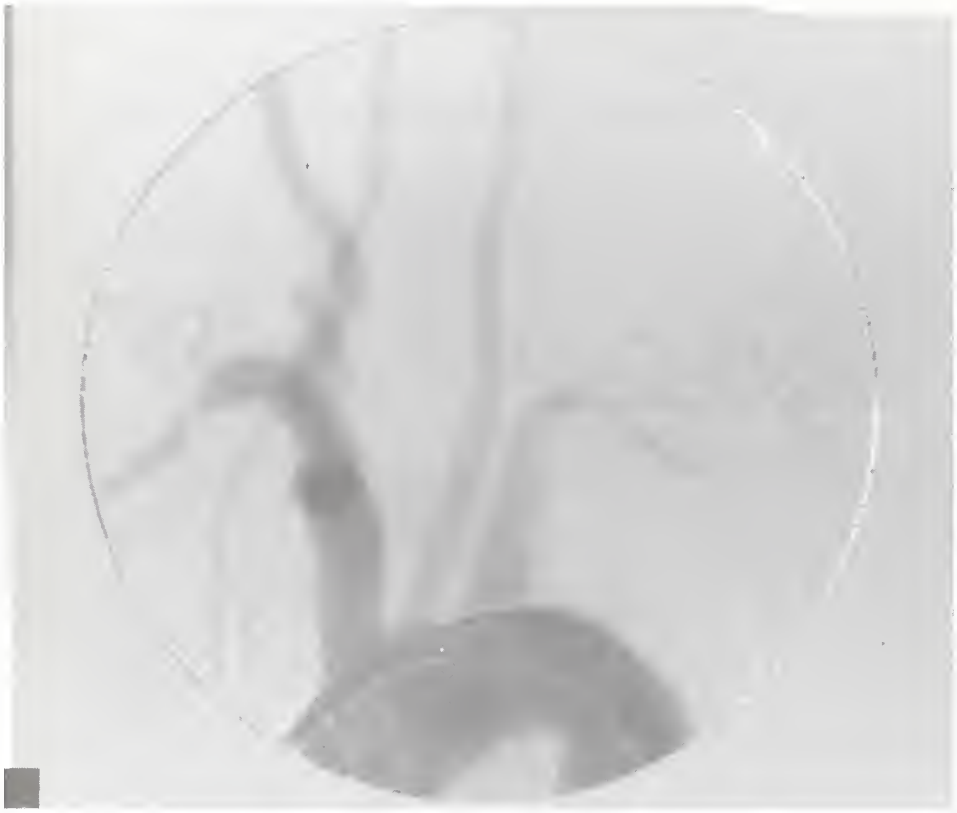

Figure 1a. Four vessel arch aortogram showing complete occlusion of the left distal subclavian artery. Notice the origin of the brachiocephalic vessels is relatively healthy, which distinguishes this disease from Takayasu's arteritis.

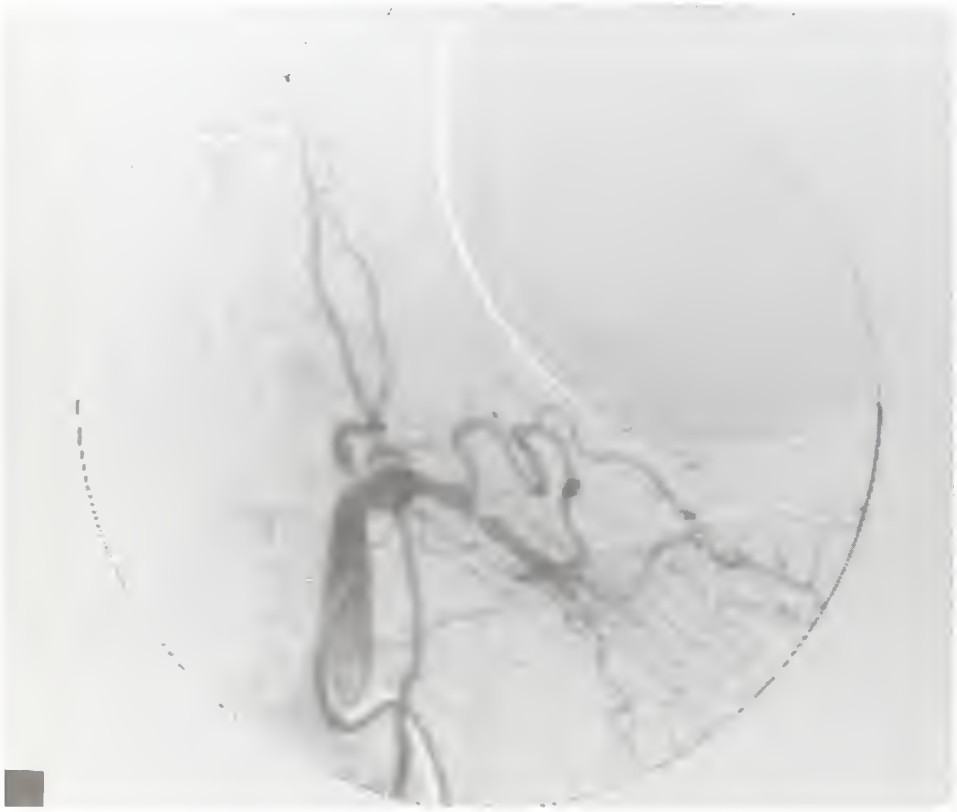

Figure 1b. Selective left subclavian arteriogram showing same pathology.

blindness caused by temporal arteritis appeared in 1938. Nevertheless, 10 centuries after Ali Ibn Isa first described temporal arteritis, this disease remains an enigma.

Temporal arteritis is charaterized as systemic panarteritis predominantly affecting patients over age 50. An incidence rate of 17.4 cases per 100.000 population per year among patients over age 50 has been reported, but this incidence has been noted to increase to 30 cases per 100,000 per year among patients over 70 (2).

Pathology of the disease

Although any median or large-sized artery may be affected, the brachiocephalic vessels are most often involved. The stenoses are usually peripherally located in these vessels and the aorta is rarely involved. Extracranial lesions occur in less than 10 percent of patients. Blindness occurs with disturbing frequency as a consequence of this disease process, although it is easily prevented by early steroid therapy, Histopathologically, it is panarteritis with giant cell infiltration.

Manifestations and diagnosis

The clinical course of temporal arteritis is quite typical. Classically, middle-aged or elderly women develop a flu-like illness with malaise, anorexia, a temperature of 100 F to 101 F, headache, myalgia, and weight loss. This may persist for one to three weeks and then symptoms may subside.

In the second or third week of illness, jaw claudication while eating, scalp tenderness while combing hair, or severe headaches may occur. At this time, tender, elevated and red temporal or occipital arteries are noted by some. These usually clear within two to three weeks, but the systemic signs and joint distress continue or increase.

Three to 12 weeks into the course of the disease, the onset of visual symptoms with extraocular muscle dysfunction, amaurosis fugax, and ischemic optic neuritis may develop. Blindness occurs in 40 percent to 50 percent of untreated patients. Throughout this time, the erythrocyte sedimentation rate is generally elevated in the range of 40 to 140

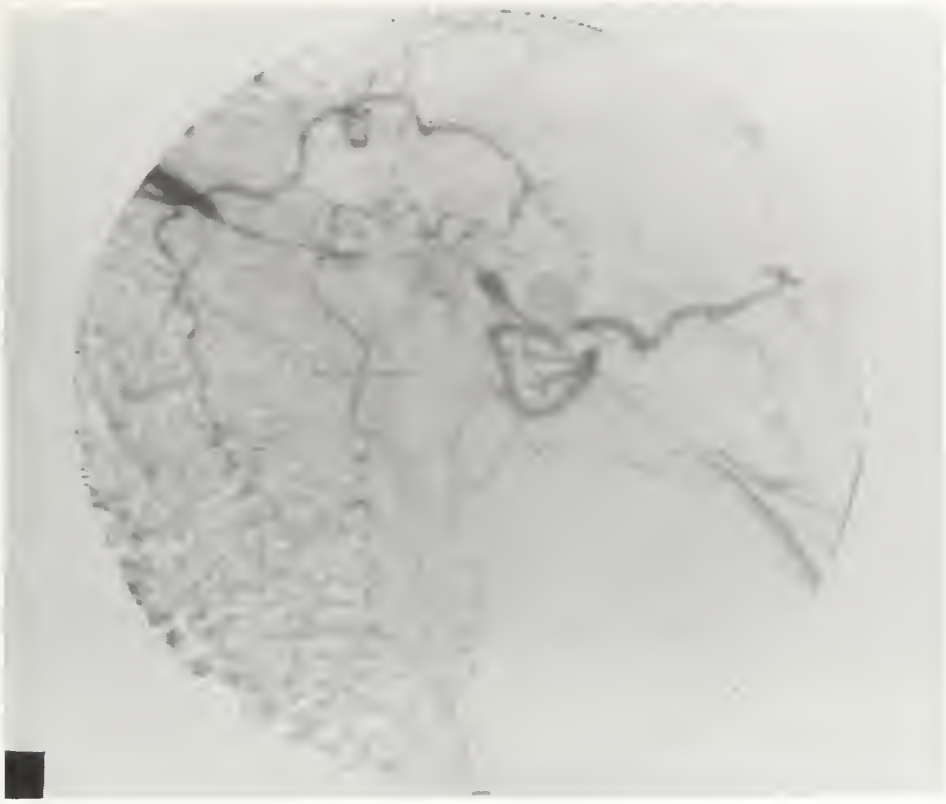

Figure 1c. Selective subclavian arteriogram showing complete occlusion of the left axillary artery.

Figure 1d. Abdominal aortogram showing significant stenosis of the origin of the left renal artery.

mm./hour. Bilateral arm or leg claudication may become evident after 8 weeks to 24 weeks, but this rarely progresses to gangrene. Steroid treatment can arrest the process dramatically; but even without therapy, the disease is generally self-limited, although it may last from one to four years.

Disability can be very significant, however, from permanent visual loss or arterial complications. Deaths are rare and documented causes include aortic dissection, rupture of the aorta, myocardial infarction, and cerebral infarction. The usual tempo of the disease should allow early effective therapy in the prevention of ocular and arterial complications before they develop, but several factors can make temporal arteritis a diagnostic challenge (3).

First, in rare instances the tempo of the disease can be most brisk. Patients can be seen to advance from a flu-like syndrome within several days to complete blindness, or to death from dissection of the thoracic aorta within a week of the syndrome (3).

Second, because the syndrome may have several phases, mimic common minor illness, and develop during a period of several weeks, many older patients will neither recall nor correlate these events unless carefully questioned. The systemic symptoms at the onset of temporal arteritis, include malaise in almost 100 percent of the cases, fever, anorexia and weight loss in 30 percent to 50 percent of the patients, might suggest an extensive search for occult malignancy. As the diagnostic spectrum of temporal arteritis has broadened, the finding of an abnormal cranial artery on palpation has dropped from 100 percent to 45 percent-67 percent in biopsy proven cases (3,4,5).

A temporal artery biopsy is indicated to confirm the diagnosis. If a biopsy is done within one to five days after the institution of steroid therapy, the pathologic findings will not be obscured. In the evaluation of temporal artery biopsy specimens, it is mandatory that the pathologist meticulously section the specimen and carefully examine multiple sections. It is not uncommon to find diagnostic giant cell infiltration in only one of 40 or 50 sections. When a

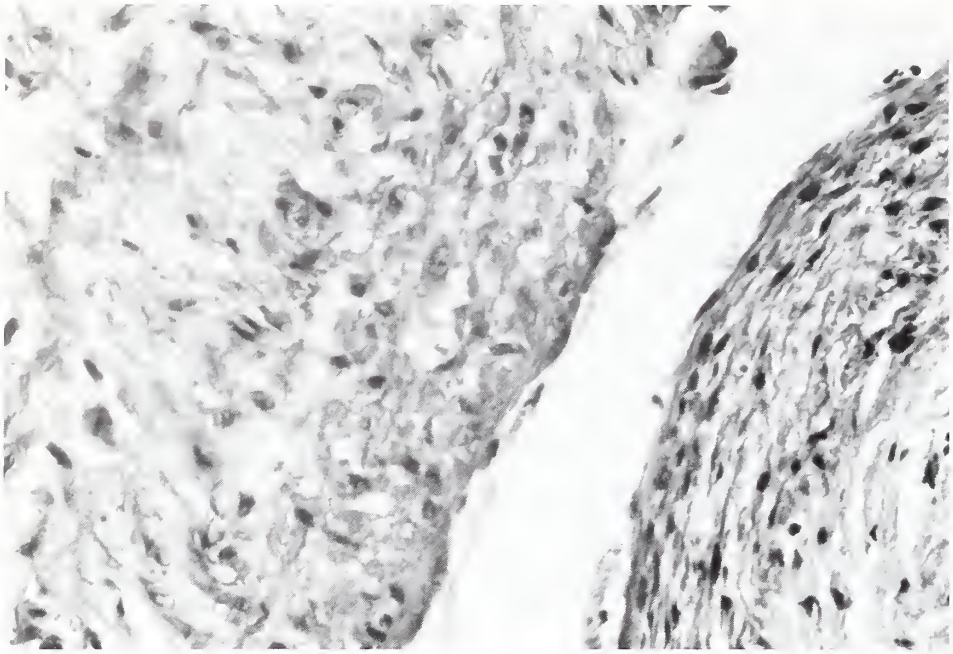

Figure 2a. Notice the panarteritis including an increase in cellularity in the intima and interstitial edema with narrowed lumen.

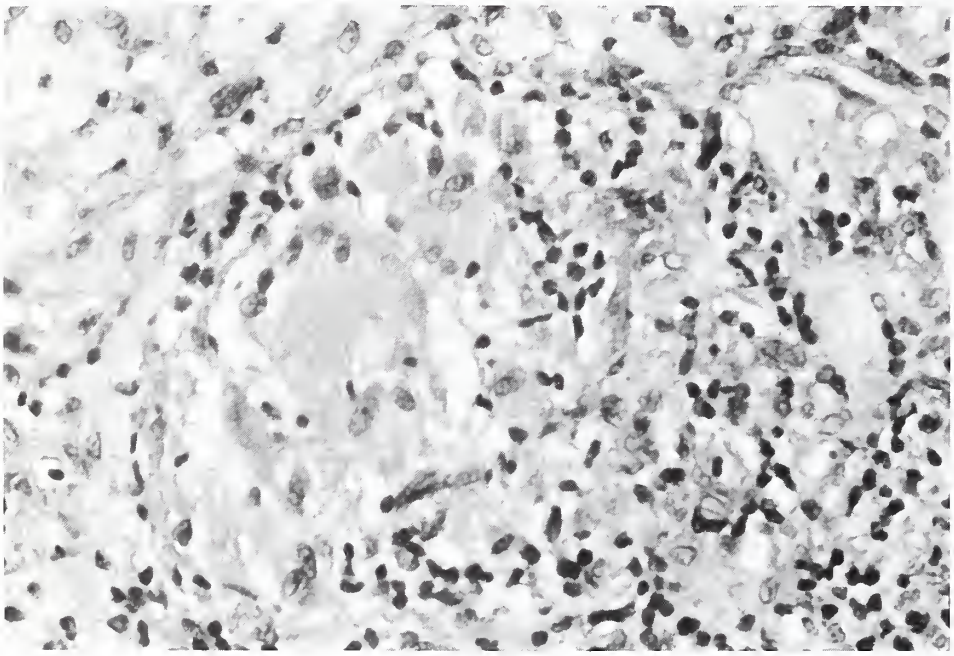

Figure 2b. Non-caseating granuloma found within the arterial wall.

blind biopsy is done, a generous 4 cm. to 7 cm. of artery is taken under local anesthesia; and if it is negative, the contralateral side should be biopsied. Such generous specimens are required because of the skip areas typical of the disease. Some authors have suggested that the yield of positive findings would be higher if the physician examined the temporal artery preoperatively with a fine-tip Doppler ultrasound, carefully listening for abnormalities of flow characteristics within the temporal arteries (3,4).

When upper extremity symptoms are present, the angiographic findings within the subclavian arteries are generally diagnostic as seen in our patient (Figure 1b). The angiographic features of temporal arteritis as seen in the subclavian arteries are characterized by long tapering stenoses that arise more distally on the subclavian arteries and may extend into the axillary arteries. In contrast to Takayasu's arteritis, temporal arteritis classically does not involve the brachiocephalic vessels where they arise from the aortic arch.

Treatment

All patients are treated with 60 mg. of prednisone daily for one week; then this is reduced to 45 mg. per day for 30 days. Thereafter, the prednisone dosage should be reduced by 5 mg. every two-three weeks until the dose reaches 10 mg. per day. Thereafter, the prednisone is reduced by 1 mg. every two weeks. Both the clinical findings and sedimentation rate are monitored with each dose change. If either becomes abnormal, the dose is boosted backwards one or more levels until suppression occurs and is maintained for four-eight weeks before reduction is resumed.

Surgery is rarely necessary for temporal arteritis. Appropriate indications for surgery include threatened limb loss, severe hypertension, or incapacitating claudication, as in our patient. There are only a few cases in which surgery should be considered before steroid therapy has been started. This is important because many patients have relief of their ischemic symptoms after prednisone is started. Additionally, surgical procedures such as endarterectomy or bypass grafting in the acute phase generally result in rapid reocclusion of the operated vessels by pronounced arteritis involvement.

In conclusion, giant cell temporal arteritis and Takayasu's disease have similar histological findings but different clinical pictures. In each of these disorders the primary treatment is medical, employing a prolonged course of steroid therapy. Surgery should be reserved for severe specific disabling symptoms. Surgeons should avoid surgical intervention if possible during the active phase of the disease process. Appropriate medical therapy and careful and intelligent timing of

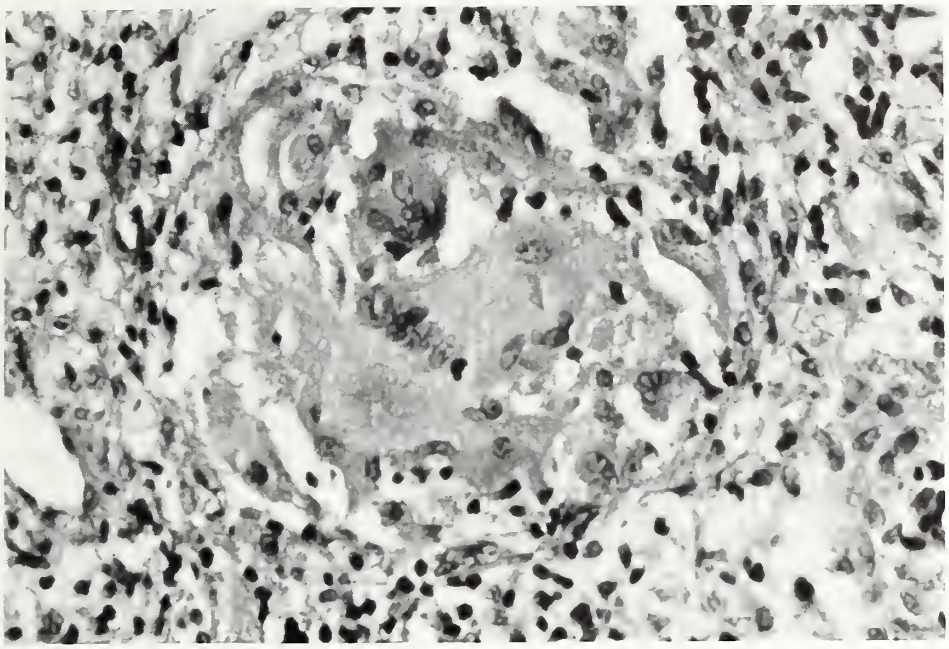

Figure 2c. Same as Figure 2b, magnified by 400.

the surgical procedure provides the best care for the patient and minimal frustration for the surgeon.

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Spectrum of clinical manifestations of familial adenomatous polyposis

A. K. SOHRABI, M.D., M.P.H., F.A.C.S.*
Attending Surgeon, VA Medical Center, Huntington

P. NOWZARI, M.S.P.H., Ed.D.
Assistant Professor, Department of Safety and Health Education, School of Physical Education, West Virginia University, Morgantown

Abstract

Familial adenomatous polyposis is an autosomal dominant disease that primarily involves the colon, but may involve other organs such as the central nervous system, ampulla of Vater, liver, soft tissue and the remainder of the gastrointestinal tract. In this report we present the adenocarcinoma of the uterus and adenocarcinoma of the ovary as a new addition to the clinical spectrum of familial adenomatous polyposis.

Due to the tendency for development of multiple primary carcinomas in patients with familial adenomatous polyposis, these patients need to be followed very closely for detection of new malignancies. If diagnosed early and treated accordingly, they could have a long-term postoperative survival.

*Dr. Sohrabi was an associate profesor of surgery and community medicine at the West Virginia University School of Medicine in Morgantown when this paper was written.

Introduction

Familial adenomatous polyposis was introduced by Dukes (1) in 1930 as an autosomal dominant inherited disease. Gardner (2) and Turcot (3) added the association of soft tissue tumors and central nervous system malignancies to this entity.

In the last 20 years, there have been several clinical additions to this disease which include the association of the desmoid tumors (4), carcinoma of the ampulla of Vater (5), hepatoblastoma (6), congenital retinal pigments, supernumerary teeth, and bone lesions especially in the mandible (7,8). It is not known whether all of these clinical manifestations are due to one solitary gene defect or whether each clinical manifestation does have its own gene pattern.

The clinical spectrum of familial adenomatous polyposis is clearly expanding and clarification of the genotype-phenotype relationship is obviously needed. We are adding adenocarcinoma of the ovary and the uterus to the previously mentioned clinical spectrum of this disease.

Patient's presentation

The first patient we studied had subtotal colectomy and ileorectal anastomosis at the age of 13 for familial adenomatous polyposis. Five years later in 1973, she developed obstructive jaundice and underwent pancreaticoduodenectomy for adenocarcinoma of ampulla of Vater with local lymph node metastasis.

In 1978, this patient underwent total

hysterectomy and bilateral salphingo-oophorectomy for adenocarcinoma of the ovary; and four years later she developed adenocarcinoma in the rectal stump and underwent abdominal perineal resection and ileostomy. She was admitted to the hospital in 1986 because she had been experiencing nausea and vomiting for six months. A CT scan of the brain revealed a tumor in the left frontal lobe. She underwent a craniotomy and physicians discovered that she had a glioblastoma multiforme. She died on November 8, 1986, with transtentorial herniation of the brain. The autopsy showed several adenomatous polyps in the small bowel, three of which displayed adenocarcinoma.

The second patient we examined was a sister of the previous patient. She was diagnosed as having familial polyposis at the age of 16. Two adenomatous polyps were removed from her rectum in 1966 and 1968 respectively, and in 1973 during a C-section, a tumor in her cecum was discovered.

In February 1973, this patient underwent an exploratory laparotomy. She had adenocarcioma of the cecum and adenocarcinoma of the jejunum as two separate primaries which had metastasized to lymph nodes. The adenocarcinoma was mucin producing. At this time, she had resecton of the jejunal adenocarcinoma and small bowel anastomosis with subtotal colectomy and an ileorectal anastomosis.

In 1979, this patient developed a brain tumor and underwent a right frontoparietal lobectomy for grade II astrocytoma. Then in 1981, she developed adenocarcinoma of the endometrium and underwent a total abdominal hysterectomy and bilateral salpingo-oophorectomy. As of February 1992, she was in good health and a CT scan of her brain was negative for tumor.

Discussion

The clinical spectrum of familial adenomatous polyposis is expanding from the simple adenomatous polyposis of the colon at the time of Dukes' research to one that at present includes adenomatous polyposis of the large bowel, small bowel, adenocarcinoma of the ampulla of Vater, hepatoblastoma, subcutaneous tumors, boney tumors, central nervous system tumors, desmoid tumors, congenital hypertrophy of the retinal pigment epithelium, supernumerary teeth, bone lesions, and as in our cases, adenocarcinoma of the ovary and adenocarcinoma of the uterus.

In 1987, Bodmer (9) from England and Leppert (10) from Utah reported the deletion of chromosome 5 in patients with familial adenomatous polyposis. At the present time, continued research aimed at clarification of the genotype-phenotype relationship is the most demanding issue in familial adenomatous polyposis. In accord with observations of long postoperative survival in the cancer family syndrome of Lynch, we have seen the same in these two patients.

The first patient, in spite of having cancer of the pancreas with metastasis to the lymph node, lived 13 years after pancreaticoduodenectomy. She died of brain herniation and not from the pancreatic cancer. The second patient, in spite of having the mucin producing adenocardinoma of the cecum and jejunum with involvement of lymph nodes, is still alive and well.

The next observation we made was the tendency to have multiple primary malignancies in patients with the familial adenomatous polyposis. The first patient had four primary malignancies and she developed more in adenomatous polyps of the small bowel; the second patient also had four primary malignancies which were removed. The colon is the primary target, but the tendency to form multiple primary cancers in other organs is an obvious issue in familial adenomatous polyposis (11). Due to this fact, every patient with familial adenomatous polyposis needs to be followed very closely during the rest of his/her life for development of other malignancies. If diagnosed early and treated accordingly, patients will have a long postoperative survival. This observation has been confirmed by Henry Lynch (12) in cancer family syndrome.

Finally, the observation of adenocarcinoma of the ovary and adenocarcinoma of the uterus in these patients is a new clinical finding that needs to be added to the clinical spectrum of familial adenomatous polyposis. During any laparotomy or abdominal surgery for familial adenomatous polyposis, the uterus and the ovaries need to be palpated and inspected, and if there are any signs of malignancy, they need to be biopsied. Aspiration cytology for endometrium and sonography or CT scan of the pelvis are a part of the yearly follow-up for patients with familial adenomatous polyposis.

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A method for rapid intracompartmental pressure measurement

PAUL DONAHUE, M.D.
Chief Surgical Resident, Marshall University School of Medicine, Huntington

WILLIAM E. WHEELER, M.D.
Staff Surgeon, Upstate Carolina Medical Center, Gaffney, S.C.

Abstract

A compartmental syndrome arises in situations where increased pressure within a limited space restricts the circulation by lowering the arteriovenous gradient and function of tissues within that space. Hypotension, hemorrhage, arterial occlusion, and limb elevation all appear to reduce the tolerance of limbs for increased tissue pressure.

In early cases, patients with decreased levels of consciousness or when clinical evaluation is equivocal, pressure measurements become mandatory. Usually a single pressure measurement at the appropriate time will reveal the need for decompression, although in equivical cases, a constant pressure measurement becomes necessary.

The Wick catheter method has been widely used for this type of measurement, but we have developed a simpler system which is described in this article.

Introduction

A compartmental syndrome is a condition in which increased pressure within a limited space restricts the circulation by lowering the arteriovenous gradient and function of the tissues within that space (1). Hypotension, hemorrhage, arterial occlusion, and limb elevation all appear to reduce the tolerance of limbs for increased tissue pressure. In clear cut early compartmental compression cases, patients can be diagnosed by these clinical findings (2):

1) Pain out of proportion to the injury;

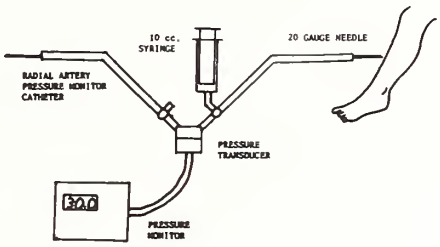

Figure 1. Diagram of the setup for obtaining rapid compartmental pressure.

2) Weakness of the compartment muscle;

3) Pain on passive stretch of the muscles of the compartment;

4) Increased tenseness of the compartment envelope; and

5) Hypothesia in the sensory distribution of nerves which pass through the compartment.

In early cases, patients with decreased levels of consciousness or when clinical evaluation is equivocal, pressure measurements become mandatory. Compartmental pressure monitoring can be helpful in predicting and observing patients at risk for compartmental syndrome. Pressures greater than 30 mm.-40 mm. mercury necessitates compartment decompression (3,4). Usually a single pressure measurement at the appropriate time will reveal the need for decompression, although in equivocal cases, a constant pressure measurement becomes necessary. The Wick catheter system has been widely used for this purpose (2,3).

We have devised a simplification of the Wick catheter method that uses equipment usually found in any intensive care unit, consisting of a standard pressure monitor, a pressure dome, pressurized tubing, heparinized saline, one three-way stopcock that locks, and one 18-gauge needle. This system involves insertion of the 18-gauge needle attached to an arterial pressure monitoring system into the muscle compartment in question. The needle is then flushed once with a minimal volume of heparinized saline, allowing 20 seconds-30 seconds for equilibration so the pressure measurement can be obtained.

The accuracy of this system is based on the fact that flushing the catheter with a small volume, usually < 1 cc., will not appreciably change the compartmental pressure. This system can be used quickly in ICU patients who are requiring pressure monitoring by attaching a three-way stopcock with an additional pressure line to the pressure transducer. This system can confirm the presence of a compartment syndrome, but is not useful in equivocal cases in which continued pressure monitoring is necessary.

Pressures obtained from this method have shown no significant difference when compared to pressures obtained from a Wick catheter in the same compartment in 20 consecutive patients (Student's T test).

Summary

This rapid, accurate method of intracompartmental pressure can be obtained with minimal extra equipment on patients in the intensive care unit. The measurements obtained from this technique are comparable to those from the Wick catheter and, if greater than 30 mm. mercury, indicate fasciotomy. If pressures are equivocal or if it is felt that the patient requires further monitoring, a Wick catheter should be put in place.

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1. Matsen FA. Compartmental syndromes. New York. Grune and Stratton, 1981:3:40.
2. Matsen FA. Winquist RA, Krugmire RB. Diagnosis and management of compartmental syndromes. Bone Joint Surg 1980; 62A:286-91.
3. Mubarak SJ, Owen CA, Hargens AR, et al. Acute compartmental syndrome: diagnosis and treatment with the aid of the Wick catheter. J Bone Joint Surg, 1978, 60A:1091-5.
4. Mubarak SJ, Hargens AR. Compartment syndrome and Volkman's contracture. Philadelphia: W.B. Saunders, 1981:47-69,99,102.

Manuscript Information

Manuscripts to be presented for publication in *The West Virginia Medical Journal* should be prepared in accordance with "Uniform Requirements for Manuscripts Submitted to Biomedical Journals" (1) (International Committee of Medical Journal Editors).

The *West Virginia Medical Journal* will not consider for publication a paper or work that already has been reported in a published paper, or is described in a paper submitted or accepted for publication elsewhere.

Manuscripts, accompanied by one copy, should be typewritten, double-spaced, on one side only of white bond paper (8½ by 11 in.), with margins of at least one inch.

Use double spacing throughout, including (in the following order) title page, abstract, text, acknowledgements, references, tables, and legends for illustrations. Begin each of the following sections on separate pages: title page, abstract, text, acknowledgments, references, individual tables, and legends for illustrations. Number pages consecutively, beginning with the title page. Type the page number in the upper right-hand corner of each page.

All persons designated as authors should qualify for authorship. Each author should have participated sufficiently in the work to take public responsibility for the concept.

The second page should carry an abstract of no more than 150 words summarizing the manuscript.

Where reference is made to generically-designated drugs, the first such reference must be followed by parentheses containing the most commonly known trade-name drug of that designation. In addition, a listing of all generic drugs mentioned in the article, with their trade-name equivalents, should appear at the end of the article.

Tables (tabular listings) and figures (photos, drawings and charts) should be numbered and the point of reference in the text indicated in parentheses, i.e., (Table 1), (Figure 1).

Photos must be good-quality unmounted glossy prints usually 5 by 7 in. but no larger than 8 by 10 in. Black and white photos are preferred. Color photos will be printed in black and white. Cost of printing photos in excess of four will be billed to the author.

Each photo (figure) should have a label pasted on its back indicating the author's name, its number and an indication of its "top." A separate legend should be provided for each photo. Do not write on the back of photos, or scratch or mar them using paper clips. Do not mount them on cardboard. Drawings and charts should be done in solid black on pure white.

Number references consecutively in the order in which they are first mentioned in the text. Identify references in text, tables, and legends by arabic numerals (in parentheses).

No more than 25 references will be published free of charge to the author.

Use the style of references seen in this *Journal,* which is based on the formats used by the U. S. National Library of Medicine in *Index Medicus.* The titles of journals should be abbreviated according to the style used in *Index Medicus.* Consult "List of the Journals Indexed," printed annually in the January issue of *Index Medicus.*

All scientific material appearing in *The Journal* is reviewed by the Publication Committee. Manuscripts should be sent to The Editor, West Virginia Medical Journal, Box 4106, Charleston, WV 25364.

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1. Ann Intern Med 1982;96:766-71.

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President's Page

Constantino Y. Amores M.D.

Get Ready . . . Get Set . . . Go!

In the opening ceremonies for the Health Care Planning Commission Task Force in the House chamber, Senator Rockefeller forwarned the members that everyone will have their own specific agendas. In the same breath, he told members they need to be able to come to a consensus.

Senator Rockefeller's words have been prophetic. As a member, I am concerned that some of the other members are not willing to yield at all so that a consensus can be reached that will truly be in the best interest of health care in West Virginia. In addition, since 26 of the members involved in the six task force subcommittees are physicians, I fear that whatever recommendations are made will be seen as the mandate of physicians in the state when that could be very far from the truth.

Now, more than ever, active participation by all physicians, not just those serving on the six subcommittees is very critical. Since the commission is required by law to complete its recommendations early this fall and submit comprehensive legislation to the 1993 Legislature this winter, we must make more of an initiative now to become involved while we still have the opportunity to provide meaningful information into the design of the proposals. If we wait it will be too late.

A schedule of the meetings for the six subcommittees (Health Services Systems; Basic Health Services; Health Care Financing and Cost Control; Health Professions; Quality of Care and Medical Liability; and Certificate of Need) is published periodically in the *WESGRAM*. I strongly encourage all members to attend these meetings and express their opinions.

Remember, we already have made an important impact on the design and structure of the Health Care Planning Commission. Physician opposition to early creation of this body caused it to become a "planning" body instead of a "policy development and implementation body." Negotiations with the governor's office also resulted in the appointment of a physician as a member of the commission; and, as I have already mentioned, 26 physicians are serving in important positions on each of the six subcommittees for the task force.

If we do not participate, if we do not effectively communicate our concerns, if we do not share information with each other, then the race is lost before we enter the first turn. If we fail to plan, then we might as well plan to fail.

So, get ready . . . get set . . . go!

Constantino Y. Amores, M.D.

Capital Sin

It's remarkable to hear liberal zealots on radio and TV still pontificating on the merits of social and economic engineering. One would have thought that with the total collapse of their Soviet Camelot they would have crawled back under their favorite rock or, at the very least, would be too embarrassed to show their faces publicly.

But, no, there they are going on about the failure of the capitalistic system and pointing to "our medical care disaster with 37 million Americans underinsured or without insurance." That figure is about 15 percent of our population.

The difficult to believe and unmentioned fact is that our "medical disaster" has managed to routinely provide the absolute highest level of medical care to an undisputed 211 million Americans – 85 percent of our population. It is also true that our worst medical care is far superior to the best medical care the majority of the remainder of the world enjoys.

American medicine is a part of, as well as a product of the capitalistic system. The difficulties attributed to failure of our economic system in this country, such as the recent riots in Los Angeles and elsewhere, rather than examples of failure, are actually consequences of capitalism's overwhelming success.

On the basis of luxuries and conveniences available to residents, there are, without question, hundreds of millions of people throughout the world who would trade places without a second thought with any abused, discriminated against, economically disadvantaged citizen of Los Angeles. That is not to say that anyone so exchanged would remain happy and satisfied for very long.

The problem arises with the perception of the relative abundance of those luxuries available to some by those who, because of their own relative paucity of luxuries, regard themselves as disadvantaged. And, indeed they are, relatively so.

It might be said that there is a comparable problem with those short in stature who aspire to play in the National Basketball Association. The liberal solution to such an inequity would be to amputate at the knees all those above a certain height. For some, perception of the availability of luxuries and conveniences is a spur to greater productivity, better efficiency and more creativity. For those, the system works well.

Theologians would have no difficulty identifying the real problem. They would point out that the problem is envy, one of the seven capital (not capitalism) sins. Liberal theologians might point to greed, another of those seven sins – greed of those damned by great abundance. There is probably a basis for argument there.

Perhaps we should all go to church and meditate on our personal medley of sins. That great liberal theologian Jimmy Carter, once meditated and later preached on another capital sin – lust. Each to his own. For those whose catechism and Sunday school lessons are too far in the past, the seven capital sins are: Pride; Covetousness; Lust; Anger; Gluttony; Envy; and Sloth.

We have nothing about which to be apologetic in American medicine. Nor does the capitalistic system. We have driven back suffering, disease and death. We have not conquered any of them. We simply have done better than any others who have tried.

Similar statements can be made about our capitalistic system. It is certainly not perfect, but it is manifestly better than anything else about.

– SDW

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And not be in sorrow too?

Can I see another's grief

And not seek

For kind relief?"

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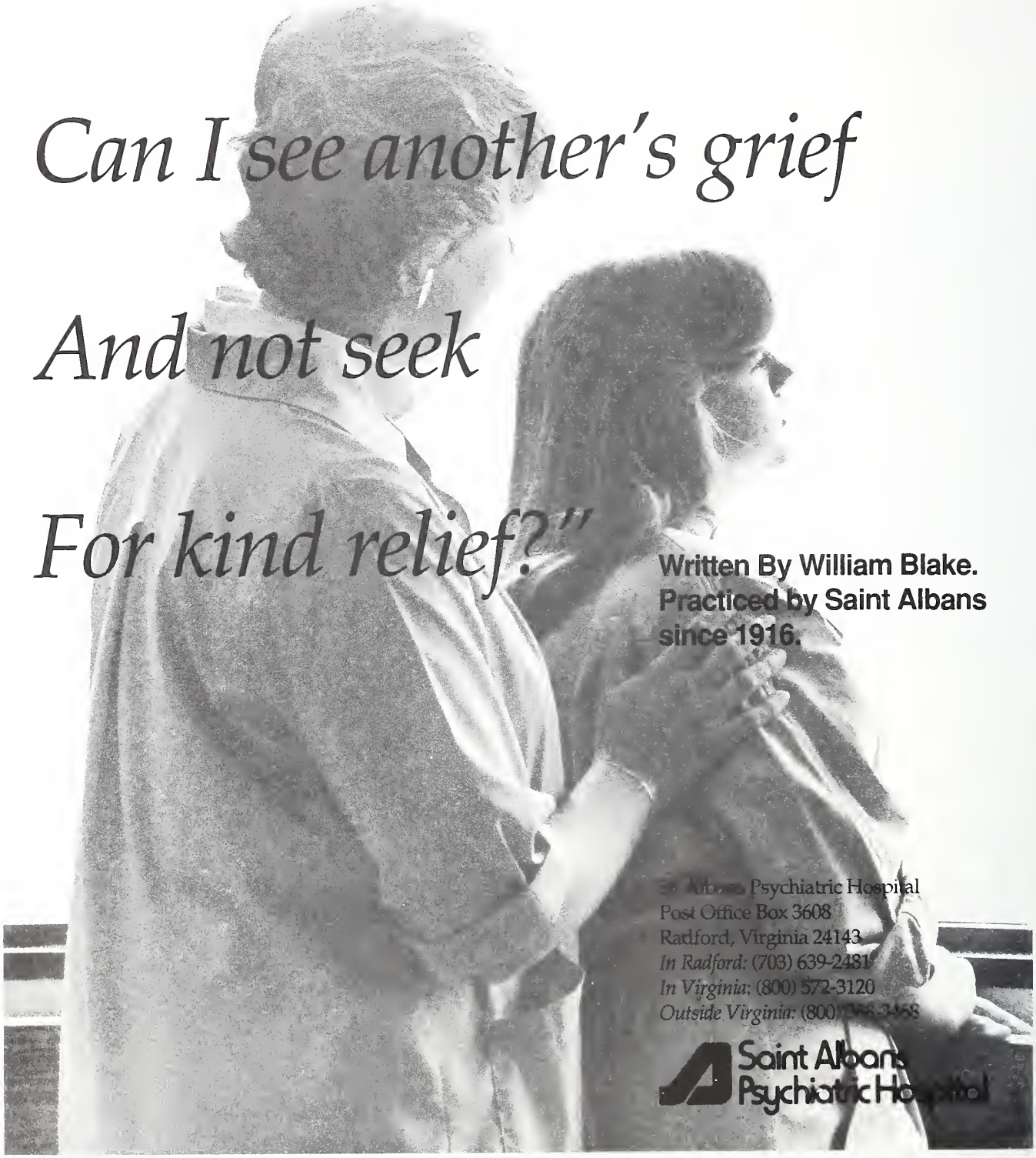

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Black Tie Formal Dance & Fashion Show - $50 per couple, Fri., Aug. 21

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At Annual Meeting

Auxiliary to present formal ball, fashion show

As a special highlight at this year's WVSMA Annual Meeting at The Greenbrier, the WVSMA Auxiliary is hosting a Black Tie Formal Ball with the Big Band music of the 19-piece Bo Thorpe Orchestra and a fashion show spotlighting the designs of Philippine designer Manny Punzalan.

This special evening of entertainment is set to begin at 8 p.m. on Friday, August 21 with the music of Bo Thorpe's Orchestra. BILLBOARD Magazine has said that Bo is "spearheading the movement of Big Band dance music for this era." This group has recorded albums, as well as appeared on TV specials and at hundreds of conventions and special events. They have entertained at many previous WVSMA annual meetings and have always been popular with participants.

The Bo Thorpe Orchestra will take a break at 9:30 p.m. so Manny Punzalan can take the stage with members of the WVSMA Auxiliary and 16 of their debutante daughters as his models for the fashion show. Manny is the fashion consultant for the Le Classique Couture Showroom in Virginia Beach and has received many fashion awards for his wedding and formal gowns from social and civic groups in Manila, Washington, D.C. and New York City.

Manny Punzalan

Following the fashion show, the orchestra will return and play until midnight.

Tickets for this event cost $50 per couple and can be deducted as a business expense since any proceeds will be donated by the WVSMA to AMA-ERF, which provides funds to improve medical education. To obtain tickets, fill out the registration form for the WVSMA Annual Meeting which appears on the previous page in this issue of the *Journal* and mark the section pertaining to the ball.

For more information about this event or any of the other WVSMA Annual Meeting activities, contact the WVSMA office at 925-0342.

Ballroom dancing lessons to be offered

In honor of the Black Tie Formal Ball which the Auxiliary is presenting at the WVSMA Annual Meeting, ballroom dancing lessons will be conducted by Jerry and Sherry Rose of Beckley. These lessons will be held on Thursday, August 20 from 9 p.m. - 11 p.m.

The Roses operate Dance Theatre School in Beckley and are former members of the ballet company Ballet Cirque in New York. They have danced with the Charleston Ballet and Jerry is a writer for the magazine *Dance Life*.

Tickets for lessons cost $25 and can be deducted as a business expense since any proceeds will be donated to AMA-ERF by the WVSMA, as will any proceeds from the ball. The registration form for the WVSMA Annual Meeting which appears on the previous page in this issue of the *Journal* has a section to mark if you would like to purchase tickets for the lessons.

For more details, phone the WVSMA office at 925-0342.

Jerry and Sherry Rose

Third Annual Hearing Impaired Conference set for August

The West Virginia Hospital Research and Education Foundation, Inc. is sponsoring the Third Annual Hearing Impaired Conference, August 28-29. This two-day conference is for general practice physicians and pediatricians who treat patients that are hearing impaired, ENT physicians, neurologists, audiologists, speech pathologists, social workers, teachers and parents of hearing impaired children and adults, and adults who have significant hearing losses.

Conference sessions will be held at both the Charleston House-Holiday Inn and the WVU University Medical Center in Charleston and include:

- Issues Related to Hearing Impairments of Children;
- The Implications of the Americans with Disabilities Act (ADA) on Physicians and Their Practices;
- Parents' Role in Education for the Hearing Impaired Child;
- Technologies in Early Diagnosis of Mild and Moderate Hearing Loss;
- The Relationship of Middle Ear Disease to Disabilities; and
- Children's Programming for Hearing Impaired Youth.

Meeting brochures will be available in early June through the physician staff services office or the administration office at your local hospital. For more details, phone 744-9842.

Research Day Winners

The winners of the annual Research Day competition sponsored by Charleston Area Medical Center and the Charleston Division of the WVU Health Sciences Center are (from left to right) Antonio M. Gancayco, M.D.; Judith M. Brown, MSIV; Carlotta R. Evans, M.D.; Richard R. Lotshaw, M.D.; W. Andrew Stewart, M.D.; and Nancy B. Graham, M.D. Drs. Lotshaw, Stewart and Graham were the first, second and third place winners in the original research category. Fourth-year medical student Judith Brown took first place honors in the subject review/case presentation category, with Drs. Gancayco and Evans winning second and third place respectively.

New Alzheimer's resource center opens in Chicago

The Alzheimer's Association recently dedicated the Benjamin B. Green-Field National Alzheimer's Library and Resource Center in Chicago. The center's mission is to help increase knowledge of the medical, clinical, and social aspects of Alzheimer's disease and related disorders.

For additional information, contact Patricia Pinkowski, director, Benjamin B. Green-Field National Alzheimer's Library and Resource Center, 919 N. Michigan Ave., Suite 1000, Chicago, Ill. 60611-1676, (312) 335-9602.

AMA management seminars announced

AMA members and other interested physicians are invited to take advantage of any of a series of special seminars covering a wide range of topics in locations across the United States over the next five months.

Offered by the AMA Financing & Practice Services, Inc. and AMA Investment Advisers, Inc., the seminars cover topics such as Starting Your Practice; Joining a Partnership or Group Practice; Successful Money Management; Financial Strategies for Successful Retirement; Insurance Processing; CPT and ICD-9 Coding; Medical Collections Management; and the Business Side of Medicine.

Seminar locations include Chicago; Houston; Atlanta; Los Angeles; Raleigh, N.C.; Washington, D.C.; Ann Arbor, Mich.; New York City; San Francisco; New Orleans; Hilton Head; Sante Fe; St. Louis; Traverse City, Mich.; Boston; Miami; St. Louis; Denver; Minneapolis; Philadelphia; San Diego; Baltimore and Seattle.

Contact AMA at 1-800-366-6968 to register or to obtain copies of the brochures listing the courses.

Carl Zeiss, RIT to offer microsurgical imaging course

The Carl Zeiss Inc. Surgical Products Division and the Rochester Institute of Technology's School of Photographic Arts and Sciences will conduct a microsurgical imaging course this summer.

The three-day course will be held at the School of Photographic Arts and Sciences on June 8-10 and 15-17, and July 13-15 and 20-22.

The course is designed for microsurgeons and associated staff who need to document their surgical procedures through a microscope with video and 35mm still photography. The course is being offered to help those individuals produce high-quality photographs and videotapes.

Courses are limited to 12 people so all attendees can freely interact with faculty to cover individual concerns.

To register or for more information, contact Carl Zeiss Inc., Surgical Products Division, One Zeiss Drive, Thornwood, N.Y. 10594, 1-800-442-4020.

Dr. Mills receives Family Doc Award

Dr. Mills

Dr. Woodrow W. Mills, a longtime Kenova physician, has been honored by the West Virginia Chapter of the American Academy of Family Physicians, who presented him with the 1992 Family Doc Award at their 40th Annual Scientific Assembly in Charleston. The Family Doc Award is presented annually to a family physician who in a very special way has earned the respect of patients and colleagues.

Dr. Mills was born May 16, 1911, in Canterbury, in rural Mingo County. His family moved to Kenova in 1917, where he graduated as class valedictorian of Ceredo-Kenova High School in 1929. He graduated with honors from Marshall College and returned to Wayne County, where he pursued a teaching career for seven years.

Dr. Mills then entered West Virginia University and completed his first two years of medical education in 1942. He subsequently graduated from the Medical College of Virginia in 1943 and did an internship at St. Mary's Hospital in Huntington.

After serving in the United States Army Medical Corps from 1943-46, Dr. Mills again returned to Kenova, where he began his practice in family medicine. In 1951, he completed a residency in anesthesiology at Hartford Hospital in Hartford, Conn., and then resumed his practice in Kenova, where he continues to see patients four days a week.

A WVSMA member since 1947, Dr. Mills is also a member of the Cabell County Medical Society, Southern Medical Association, American Society of Anesthesiologists, American Academy of Family Physicians and is past president of the Norval Carter Memorial Medical Society.

APA film wins international award

The American Psychiatric Association's 1991 public awareness film, "Depression: The Storm Within," has been awarded a Golden Eagle, the Council on International Non-Theatrical Events' (CINE) highest award in its Public Health category.

The 30-minute film offers non-medical audiences information about depression and its treatments through the real-life stories of psychiatrist Linda Austin, M.D., and her patients and colleagues at the Medical University of South Carolina.

"Depression: The Storm Within" is the third in the APA's "Let's Talk About Mental Illnesses" film series. The series is the centerpiece of a five-year public information campaign designed to increase public awareness of mental illnesses which emphasizes that mental illnesses are diagnosable, treatable and no cause for shame.

"Depression: The Storm Within" and the two other films, "The Panic Prison" and "Faces of Anxiety," are available through local psychiatric societies and through the free-loan program of Modern Talking Picture Service (1-800-243-6877).

For more information about the film series and campaign, contact the American Psychiatric Association, Division of Public Affairs, 1400 K Street, NW, Dept. CF, Washington, D.C. 20005

19th AMA-HMSS Assembly Meeting set

The American Medical Association is encouraging medical staffs from around the country to participate in the AMA-HMSS Assembly Meeting June 18-22, at the Chicago Marriott Hotel in Chicago.

The HMSS Assembly provides medical staffs with an opportunity to discuss and participate in the policymaking process of the AMA. In addition, participants have the option of attending programs entitled "Medical Staff Bylaws: Principals and Practices," and "Outcomes Management: A Medical Staff Issue."

For further details about the meeting or to give the name of your HMSS representative if he or she is unable to attend, please call (312) 464-4754.

Medical ethics course to be taught at Canaan Valley

The West Virginia Network of Ethics Committees is offering a Summer Intensive Course in Medical Ethics, July 9-11, at Canaan Valley Resort and Conference Center.

This meeting is designed for health care professionals who serve or plan to serve on an institutional ethics committee, or those individuals who are the institutional resource person for ethical issues. The course is also appropriate for physicians, nurses, social workers, other health care personnel, administrators, attorneys and clergy who want to improve their knowledge of medical ethics.

To facilitiate small group dynamics, this course will be limited to 60 participants. The WVU Office of CME has certified this event for 16.5 credit hours in Category I of the Physicians' Recognition Award of the AMA. This program has been approved for 19.8 contact hours by the West Virginia Nurses Association and is co-sponsored by WVU Hospitals. Application has also been made for social work contact hours, continuing legal education hours, and nursing home licensure credits.

The registration deadline is June 12 and for more information contact Dr. Alvin Moss at 293-7618.

Philadelphia site for wound healing symposium

The Graduate Hospital Department of Surgery and The Wound Care Center in Philadelphia are hosting a international clinical and scientific symposium entitled "Innovative Technologies in Wound Healing" on October 1, 2, and 3.

This seminar will feature 20 internationally renowned experts on wound healing presenting topics such as "The Diabetic Foot," "Biomechanics and Foot Pressure," "Growth Factors," and "Basic Science of Tissue Repair." To appeal to a diverse audience, presentations by experts will be interspersed with panel discussions and Q & A periods.

Poster presentations are being solicited. To register or request a brochure, please call 215-448-1508.

Multiple Sclerosis Society to kick-off One Day Bike Tour

The West Virginia Chapter of the National Multiple Sclerosis Society will hold its first One Day Bike Tour for MS on June 20 in Morgantown. Over 250 people are expected to participate in this West Virginia Day cycling event to raise money to help fight multiple sclerosis.

The bike tour will consist of 25, 50, and 100-mile loops that cyclists can choose to complete while raising at least $50 in pledges to participate. The event features catered breakfast and lunch, and rest stops every 10-12 miles to offer water, sport drink, fruit, and snacks. The tour will begin and end at the Public Safety Building on Spruce Street in downtown Morgantown, where an arts and crafts fair will be held to celebrate West Virginia Day.

Proceeds from the event will benefit the over 2,000 persons locally who have multiple sclerosis, and the estimated quarter of a million Americans nationwide who have this disease.

For further information about the One Day Bike Tour or multiple sclerosis, call the National Multiple Sclerosis Society at 1-800-628-5645.

APS publishing new journal

The American Pain Society (APS) is printing a new journal entitled *APS Journal,* which is devoted to the scholarly presentation and discussion of issues relating to pain research, diagnosis, treatment and management.

Each issue of the *APS Journal* will feature the latest in research and therapy through peer-reviewed focus articles and commentaries. The focus articles discuss topics in pain research or patient care and present hypotheses or conceptual positions of specialists. Arguments are based on scientific evidence and feature abstracts summarizing the theses. Commentaries critique the focus articles by drawing on further laboratory or clinical evidence.

The APS, a national chapter of the International Association for the Study of Pain, is a multidisciplinary not-for-profit educational and scientific organization comprised of clinicians and researchers. The APS' mission is to serve people in pain by advancing research, education, treatment, and professional practice.

For information about the APS, phone (708) 966-5595. To subscribe to the *APS Journal,* contact Churchill Livingstone, Inc., at 1-800-553-5426.

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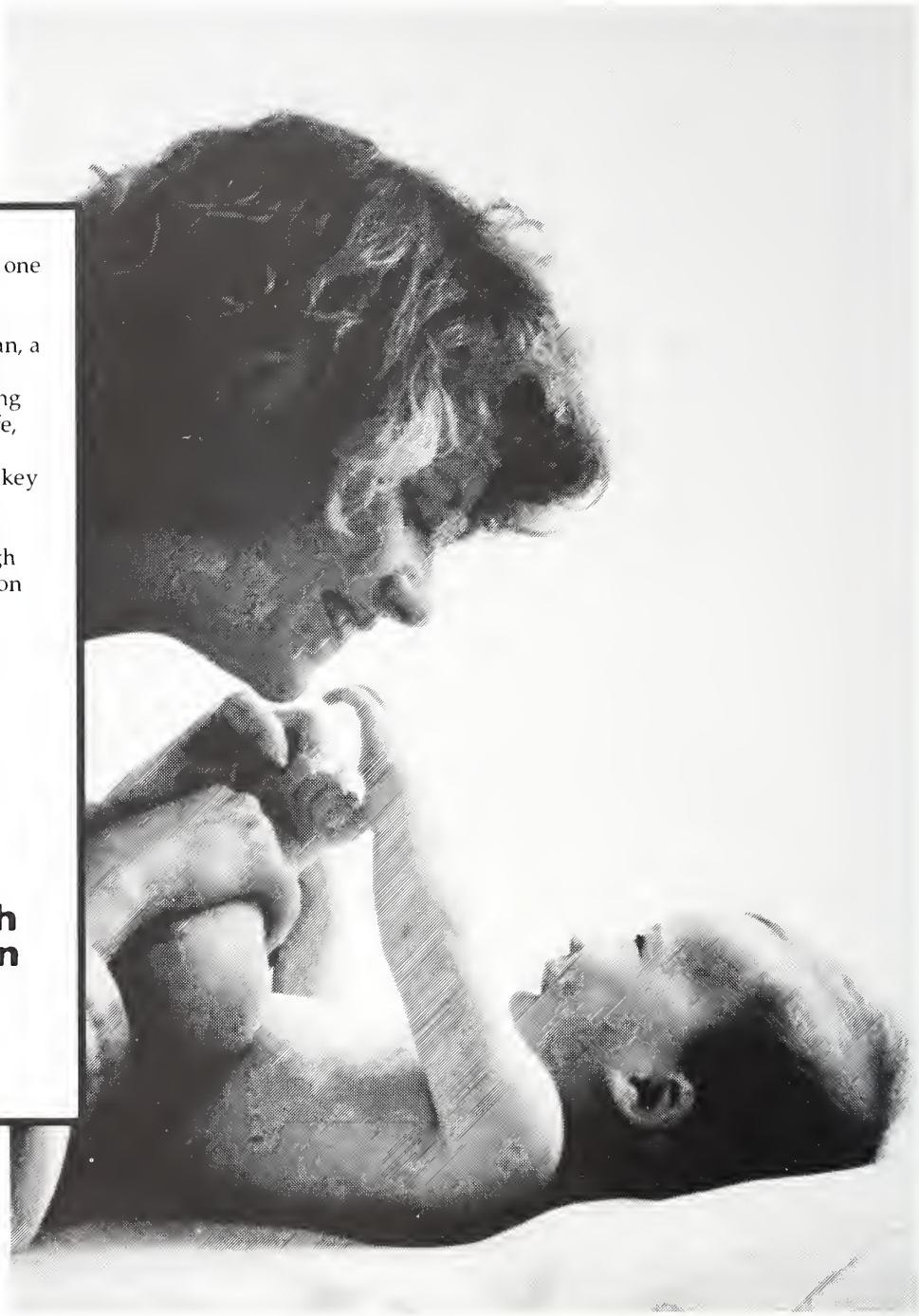

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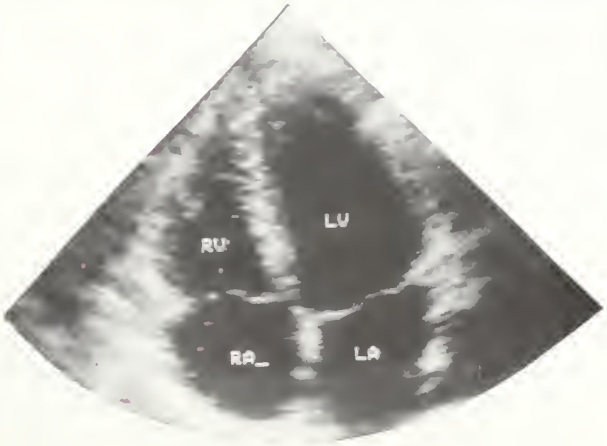

Ophthalmology
Breast
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Abdominal
Obstetrical

Continuing Medical Education

Listed on this page are some of the upcoming CME programs which will be held in the state.

The programs this month were compiled by: Robin Rector, coordinator for CME for Charleston Area Medical Center; Kari Long, program director of CME and rural services for WVU; and Thelma Wilson, education coordinator for the Raleigh County Medical Society.

Futher details about these CME activities may be obtained by calling Rector at 348-9580; Long at 293-3937; and Wilson at 255-6341.

If you would like to have the CME programs offered by your institution or association for physicians published in the *Journal*, please contact Nancy Hill, managing editor, at 925-0342.

CAMC/WVU Health Sciences Center - Charleston

April 25 - "Wound Care Management," 7:30 a.m. - 4:30 p.m., WVU Health Sciences Center, auditorium

June 2-3 - "Community-Based Prepared Childbirth: A How To Seminar for the Instructor," 8 a.m. - 4:30 p.m., WVU Building, 2nd floor, Parkersburg

June 4-5 - "Community-Based Prepared Childbirth: A How To Seminar for the Instructor," 8 a.m. - 4:30 p.m., Raleigh General Hospital, Education Classroom, Beckley

June 6 - "Cardiology Update - A Celebration of 30 Years of Cardiology Practice in Charleston, 8 a.m. - 12:30 p.m., WVU Health Sciences Center, auditorium

June 8 - "Medical Care of the Patient with Head Trauma," (teleconference), 12:30 p.m. - 1:30 p.m., CAMC General Division, Room 420

June 11 - "Living with Dying," 8 a.m.- 4:30 p.m., WVU Health Sciences Center, auditorium

WVU Health Sciences Center - Morgantown

May 29-30 - "Treating Multiple Personality Disorder - Second Annual Conference," WVU Campus, Percival Hall, Morgantown

May 29-31 - "Mammography Update," Euro-Suites Hotel, Morgantown

May 30-31 - "Anesthesia Update '92," Lakeview Inn, Morgantown

Raleigh County Medical Society - Beckley

May 26 - "Antibiotic Prophylaxis," Raymond A. Smego Jr., M.D., Raleigh General Hospital, 7 p.m.

May 28 - "The British Approach to Asthma and Hayfever," Edward Morgan, M.D., Black Knight Country Club, 6:30 p.m.

June 15 - "Lipids: A Contemporary Approach," Stewart Nunn, M.D., Raleigh General Hospital, 7 p.m.

June 18 - "Alternate Strategies for Treatment of Obstructive BPH," Allen J. Wein, M.D., Black Knight Country Club, 6:30 p.m.

Outreach Programs

Key to Sponsors

★ *WVU Health Sciences Center, Morgantown*

☐ *CAMC/WVU Health Sciences*

Clarksburg ★ VA Medical Center, June 4, 3 p.m., "Long Term Management of Peptic Ulcers," Ronald Gaskins, M.D.

Madison ☐ Boone Memorial Hospital, June 9, 6:30 p.m., TBA*

Montgomery ☐ Montgomery General Hospital, June 3, 12:30 p.m., "Skin Cancer," Brad Cohen, M.D.

New Martinsville ★ Wetzel County Hospital, June 11, 11:30 a.m., "Lyme Disease," Rashida Khakoo, M.D.

Point Pleasant ☐ Pleasant Valley Hospital, May 28, noon, TBA*

Ripley ☐ Jackson General Hospital, June 12, noon, "TMJ," Mark Simpson, D.D.S.

Spencer ☐ Roane General Hospital, June 16, 12:30 p.m., "Care of Cervical Spine Injuries," Alfredo Velasquez, M.D.

South Williamson, Ky. ☐ South Williamson Appalachian Hospital, May 28, 5:30 p.m., "Update on Thoracscopy," John Chapman, M.D.

** To Be Announced*

Electromyography and Nerve Conduction Studies.

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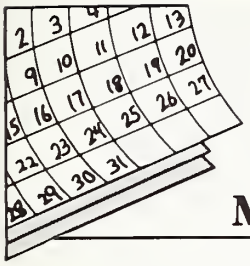


Medical Meetings

June

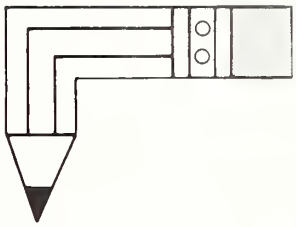
1-4—Interhospital '92 and the 17th Hospital Congress, Hannover, Germany
3-6—Facial Reconstructive Surgery - 1992, Ohio State University Hospitals and the American Academy of Facial Plastic Reconstructive Surgery (sponsors), Columbus
8-9—Society for Vascular Surgery, Chicago
8-10—Microsurgical Imaging Course, Carl Zeiss Inc. Surgical Products and the Rochester Institute of Technology's School of Photographic Arts and Sciences (sponsors), Rochester, N.Y.
9-12—Society of Nuclear Medicine, Los Angeles
11-12—Cardiovascular Drug Therapy, Ohio State University (sponsor), Columbus
15-18—Spring 1992 International Open Conference on Dissolution, Bioavailability, and Bioequivalence, FDA, Canadian Health Protection Branch and the United States Pharmacopeial Convention (sponsors), Toronto
16-19—Ohio Valley Society for Plastic and Reconstructive Surgery, Cleveland
17-22—National Association of EMS Physicians, Pittsburgh
18-22—AMA-HMSS Assembly Meeting, Chicago
18-23—American Diabetes Association, San Antonio
26-28—American Medical Women's Association, Columbus

July

9-11—Summer Intensive Course in Medical Ethics, West Virginia Network of Ethics Committees and WVU Hospitals (sponsors), Canaan Valley Resort and Conference Center
10-12—American College of Allergy and Immunology, Nashville
12-15—International Society for Adolescent Psychiatry, Chicago
12-17—Institute for Healthcare Quality Management, Healthcare Quality Educational Foundation (sponsor), Northwestern University, Evanston, Ill.
13-14—2nd Annual Meeting of the Southern Association for Geriatric Medicine, London
17-19—Caring for the Aging Population: Knowledge and Skills for the Primary Care Physician, San Francisco

For More Information . . .

Contact the Journal for additional information about most of the above meetings. Call (304) 925-0342.



Poetry Corner

Newborns 1960-90

In the hospital nursery, one was mine among nine boys and two girls.
In the delivery room I had left my blood and pain.
How could I have given birth to a girl! (I would have sons later.)
I would name her Joyce and take her home, because in disappointment,
There was some Joy in it.

They consoled me, "Your baby is beautiful. She's perfect."

The doctor who removed the dysfunctional organ through the vagina
Brought us together for the final birth of the uterus.
The voice was heard, "Pull down on it; the uterus is large."
Half-felt the soft strange journey of the uterus through the labia
and the last blood in the delivery room,

I am being moved to another room. Someone said, "Isn't she beautiful."

All the while, a large world in progress and prosperity existed, though
Usually the fruits of the womb went out into the streets,
Drove fast cars in the suburbs, took "easy choices" and didn't
Find who they should be; or worse, shot up with guns and drugs,
Or, conceived babies without fathers.

In these years, the roles of men and women merged, until there would be
No one at home to nurture them, though, "They were beautiful."

Lee L. Neilan, M.D.

Please address your submissions for Poetry Corner to: Stephen D. Ward, M.D., Editor, West Virginia Medical Journal, Box 4106, Charleston, WV 25364.

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1. Data on file, Lilly Research Laboratories. *See accompanying page for prescribing information.* © 1991, ELI LILLY AND COMPANY NZ-2947-B-249304

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Indications and Usage: 1. *Active duodenal ulcer*—for up to 8 weeks of treatment at a dosage of 300 mg h.s. or 150 mg b.i.d. Most patients heal within 4 weeks.

2. *Maintenance therapy*—for healed duodenal ulcer patients at a dosage of 150 mg h.s. at bedtime. The consequences of therapy with Axid for longer than 1 year are not known.

3. *Gastroesophageal reflux disease (GERD)*—for up to 12 weeks of treatment of endoscopically diagnosed esophagitis, including erosive and ulcerative esophagitis, and associated heartburn at a dosage of 150 mg b.i.d.

Contraindication: Known hypersensitivity to the drug. Because cross sensitivity in this class of compounds has been observed, H_2-receptor antagonists, including Axid, should not be administered to patients with a history of hypersensitivity to other H_2-receptor antagonists.

Precautions: *General*—1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Dosage should be reduced in patients with moderate to severe renal insufficiency.

3. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

Laboratory Tests—False-positive tests for urobilinogen with Multistix® may occur during therapy.

Drug Interactions—No interactions have been observed with theophylline, chlordiazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450 enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increased serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility—A 2-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a 2-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups.The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a 2-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in 1 fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in 1 fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizabidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Worldwide, controlled clinical trials included over 6,000 patients given nizatidine in studies of varying durations. Placebo-controlled trials in the United States and Canada included over 2,600 patients given nizatidine and over 1,700 given placebo. Among the adverse events in these placebo-controlled trials, only anemia (0.2% vs 0%) and urticaria (0.5% vs 0.1%) were significantly more common in the nizabdine group. Of the adverse events that occurred at a frequency of 1% or more, there was no statistically significant difference between Axid and placebo in the incidence of any of these events (see package insert for complete informabon).

A variety of less common events were also reported; it was not possible to determine whether these were caused by nizatidine.

Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to 3 times the upper limit of normal, however, did not significantly differ from that in placebo patients. All abnormalities were reversible after discontinuation of Axid. Since market introduction, hepatitis and jaundice have been reported. Rare cases of cholestatic or mixed hepatocellular and cholestatic injury with jaundice have been reported with reversal of the abnormalities after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in 2 individuals administered Axid and in 3 untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of anti-androgenic activity due to nizatidine. Impotence and decreased libido were reported with similar frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Anemia was reported significantly more frequently in nizatidine than in placebo-treated patients. Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H_2-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental—Urticaria was reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliabve dermatitis were also reported.

Hypersensitivity—As with other H_2-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. The ability of hemodialysis to remove nizatidine from the body has not been conclusively demonstrated; however, due to its large volume of distribution, nizatidine is not expected to be efficiently removed from the body by this method.

PV 2093 AMP [101591]

Additional information available to the profession on request.

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Department of Health & Human Resources

Bureau of Public Health News

This page of material is submitted and paid for by the Bureau of Public Health.

Phone numbers, zip codes changed at all state agencies

Since April 1, all state agencies have been requested to use extended nine-digit zip codes for all their correspondence. This change was implemented to ensure quicker, more efficient postal service for all of state government.

Most state agencies in the Charleston area are also in the process of changing their telephone and fax numbers. Since April 15, state offices with a 348 prefix phone or fax number began using a 558 prefix instead. In most cases, the last four digits will remain the same. For example, the commissioner of Public Health's office number was 348-2971, and it is now 558-2971.

For several weeks during the transition, the original 348 numbers will automatically switch over when dialed to allow callers to get used to the new numbers. The change comes about at the request of C&P Telephone Company which needed to free up the 348 numbers for more of their business customers.

Bureau reorganizes; two new office directors named

Reorganization within the Bureau of Public Health has resulted in name changes for two Bureau offices, and the appointment of two new office directors.

Mary Huntley is now the director of the Office of Community and Rural Health (OCRH), overseeing the divisions of local health, primary care and recruitment, emergency medical services and rural health policy. Mary has most recently been acting director of the OCRH. She has worked in public health for a number of years and previously has served as the director of the Office of Rural Health Policy and as the head of the West Virginia Perinatal Task Force.

Pat Moss is the new director of the Office of Maternal and Child Health (OMCH), supervising the divisions of children's services, women's services, care coordination, dental health and research and evaluation. Pat comes to the OMCH from Charleston Area Medical Center. Prior to that she served with West Virginia Human Services as director of Social Services and previously worked for several years with the state's maternal and child health programs.

Clergy, state join forces to address infant mortality

Governor Gaston Caperton has proclaimed June 6th and 7th as "Save Our Babies Sabbath Weekend," as part of the new Hold Out the Lifeline project in West Virginia.

This project is an initiative of the Southern Governor's Association/ Southern Legislative Conference's Southern Regional Project on Infant Mortality. It encourages links with statewide clergy and the Bureau of Public Health in an effort to bring awareness and solutions to the problem of infant mortality in West Virginia.

During the weekend of June 6-7, clergy will be urged to focus their sermons on infant mortality and the need for good prenatal care for women in the state. They'll also be looking for ways their congregations can help with the infant mortality problem. This may involve using the church van to transport women to prenatal appointments, or offering synagogue members as volunteers to answer the phone, do filing or other small jobs in the county health department.

The governor will also be appointing members to the West Virginia Ecumenical Coalition on Infant Mortality Prevention. This group will act as an advisory network to expand community clergy efforts around the state.

For more information, call Cathy Lee at 558-2971.

EMS Week celebrated

May 10-16 was proclaimed Emergency Medical Services Week in West Virginia by Governor Gaston Caperton as part of a national observance to recognize the efforts of members of EMS teams, including emergency room physicians, nurses, emergency medical technicians, paramedics, first responders, dispatchers, educators and administrators.

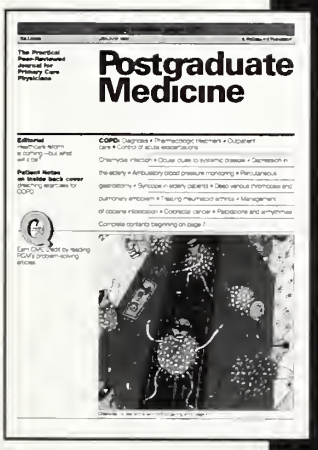
EMS organizations around the state held a variety of activities to commemorate the week. These included blood pressure clinics, displays, demonstrations, speaking engagements, public service announcements and other public education programs.

In West Virginia, emergency medical service is provided by 218 ambulance and rescue squads, with 7,800 emergency medical technicians and 930 medics who respond to some 200,000 calls each year.

For more information about EMS services, contact your local EMS organization, or call the Bureau's EMS office at 558-3956.

Large quantity generators of medical waste have until June 7 to file for a permit with the Office of Environmental Health Services. Call 558-2981 for more information.

US THEM



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Postgraduate Medicine

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Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalmic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon® is indicated as a sympathicolytic and mydriatric. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.[1,2] Also dizziness, headache, skin flushing reported when used orally.[1,3]

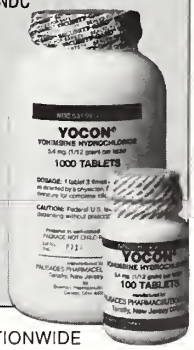
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.[1,3,4] 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to ½ tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.[3]

How Supplied: Oral tablets of Yocon® 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:

1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

Rev. 1/85



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WEST VIRGINIA UNIVERSITY HEALTH SCIENCES CENTER

Compiled from material furnished by the West Virginia University Sciences Center News Service, Morgantown.

Lewis to lead WVU's Charleston Division

Lewis

Dr. Michael J. Lewis will become WVU's associate vice president for health sciences, Charleston Division, effective July 1. He is currently chair of the Department of Family Medicine in the WVU School of Medicine in Morgantown.

Dr. Lewis will replace Dr. William O. McMillan, who resigned as associate vice president in 1991. Dr. Shawn A. Chillag, who has been serving in the post on an interim basis, will return to his duties as chair of the Department of Medicine in the Charleston Division. As associate vice president, Dr. Lewis will be responsible for all WVU's health professions' education programs in Charleston.

Dr. Lewis joined the faculty in 1985, and was named chair of family practice in 1987. He is a 1974 graduate of the WVU School of Medicine, and, following residency training at WVU Hospitals, was in private practice in St. Marys until 1985.

A fellow of the American Academy of Family Physicians, Dr. Lewis is president-elect of the academy's West Virginia chapter and is certified by the American Board of Family Practice.

Most graduates to stay in West Virginia

More than half of the Class of 1992 at the WVU School of Medicine will remain in the state for residency training next year.

Forty-four of the 75 new doctors expected to graduate in May have been accepted at residency programs in West Virginia hospitals. Another 10 will complete their next phase of training in Pennsylvania; 21 will be traveling to 15 other states for residencies. The rest of the class has yet to complete plans for next year.

"One very encouraging thing about this year's class is the number of students choosing primary-care fields," said Dr. Robert D'Alessandri, dean of the School of Medicine. "Thirteen class members are going into family medicine. A total of 46, about 60 percent of the class, are going into primary care programs."

WVU Hospitals will take on 38 new residents this summer; two-thirds were educated in West Virginia medical schools. Twenty-one WVU graduates and four from the West Virginia School of Osteopathic Medicine will come to WVUH.

Lectureship honors Dr. David Z. Morgan

Morgan

The WVU School of Medicine has established an annual lectureship in geriatrics to honor Dr. David Z. Morgan for his first 30 years of service to the school.

Dr. Morgan, the director of WVU's 65-Plus Clinic, was dean of students for 17 years. "He was surrogate parent, father confessor, and voice of reason to hundreds of medical students," says Dr. Robert D'Alessandri, dean of the School of Medicine. "Dr. Morgan has also served as assistant and associate dean, and as the school's ambassador to the medical community and liaison to the Legislature."

Dr. Morgan was certified as a medical director for long-term care facilities by the American Medical Directors Association in April. He serves in that post for three Morgantown nursing homes.

Lectureship donations can be sent to the Development Office, WVU School of Medicine, Morgantown, W.Va. 26506. Checks should be made payable to the WVU Foundation, and note "Morgan lectureship" on the memo line.

Otolaryngology conference planned

The Otolaryngology Department's Third Annual Alumni Conference will be held June 27-28 at the John E. Jones Conference Center at the WVU Health Sciences Center in Morgantown. This year's meeting will feature Dr. Gordon B. Hughes, a world-renowned neurotologist.

For more information, contact Carol Panepinto at 293-3457.

Wetmore named to national committees

Dr. Stephen J. Wetmore, professor and chair of otolaryngology - head and neck surgery, has been appointed to two national committees.

Dr. Wetmore was named to the Resident Education Committee of the Society of University Otolaryngologists - Head and Neck Surgeons. The committee determines research training for residents.

In addition, Dr. Wetmore was also appointed to the Subcommittee on Hearing by the American Academy of Otolaryngology - Head and Neck Surgery for a three-year term. He previously had served a six-year term as a member of the academy's Laser Surgery Committee.

Ferrari joins pediatric curriculum task force

Dr. Norman Ferrari, associate professor and section chief of ambulatory/adolescent pediatrics, has been appointed to a national task force regarding pediatric curriculum.

The task force will focus on composing a standard pediatric core curriculum to be adopted at all medical schools in the United States and Canada. Dr. Ferrari's appointment was made at a combined meeting of the American Medical School Pediatric Department Chairs and the Council on Medical Student Education in Pediatrics.

Call for Papers

1993 International Conference on Physician Health
January 28-31, 1993. Scottsdale, Arizona

Facing Issues, Seeking Solutions, Advocating Help

The 1993 International Conference on Physician Health, co-sponsored by the American Medical Association, the Federation of State Medical Boards, the Canadian Medical Association, and the Federation of Medical Licensing Authorities of Canada is scheduled for January 28-31, 1993, at the Marriott Mountain Shadows Resort in Scottsdale, Arizona. The conference will provide a forum for practitioners and researchers to present recent findings and innovative treatment and educational programs in the area of physician health. This conference will address a range of issues relative to physicians, including AIDS, the HIV positive physician, problems related to aging, health promotion among physicians, mental illness, physical disability, and substance abuse among physicians. Possible topics for presentation include: incidence of health problems among physicians, the presentation of health problems by physicians, their treatment, the impact of disorders on physician's family and practice, medical-legal implications of various disorders, and the impact of these disorders on hospital administrations. *Abstracts which address issues related to these topics (i.e., diagnosis, treatment, rehabilitation),but not dealing specifically with physicians are also welcome.*

Three types of presentations regarding these physician health issues are invited:

- **Poster Presentations**

Written presentations of data-based research, epidemiological research, or descriptive papers regarding treatment and educational programs.

- **Paper Sessions**

Oral presentation of scientific, data-based findings relative to topic of physician health.

- **Workshops**

Training or instructional presentations, designed to improve specific skill levels of persons who work in the area of physician health.

Abstracts for poster presentations and paper sessions should contain an introductory statement on the significance of subject matter. Description of methods, results, and conclusions should follow the introductory statement.

Abstracts for workshops should contain information on the program's intended audience, goals, teaching strategies, and materials. Evaluation data should be summarized.

Abstract may not exceed *200* words. Any abstracts exceeding that length will be rejected. Abstracts should be typed, double spaced, and mailed (not faxed). Four copies of the abstract should be sent, along with one self-addressed, stamped envelope. All submissions must list the primary and secondary authors and their professional affiliations. Telephone number and address of primary author must also be included.

Paper and Workshop submissions should indicate any audiovisual equipment that is needed.

Submissions *must* be received by June 15, 1992.

Abstracts will be submitted for blind review. Abstracts will be judged on their applicability to the conference topic area and their scientific merit. The decisions of the blind reviewers will be communicated to the abstract's primary author by August 15, 1992.

All persons who have an abstract accepted for presentation at the conference are expected to register for the conference. We are unable to reduce registration fee for presenters, nor are we able to provide any financial support for presenters. All persons who attend the conference will be responsible for their own transportation and hotel expenses, as well as making all reservations for same.

Send all materials to:

Patrick W. McGuffin, PhD, Department of Mental Health, American Medical Association, 515 North State Street, Chicago, IL 60610.

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MU School Of Medicine News

MARSHALL UNIVERSITY

Compiled from material furnished by the Office of University Relations, Marshall University, Huntington.

Cabell Huntington, MU planning new ambulatory care center

Cabell Huntington Hospital and Marshall officials on March 24 signed a "memorandum of understanding" for developing Marshall's new ambulatory care center, which the hospital has offered to build near the hospital.

Ground could be broken next year for the center, which is expected to contain at least 100,000 square feet and cost $10 million to $12 million to construct, according to Dean Charles H. McKown Jr. This building will provide sufficient space for all departments' Huntington-based outpatient services, medical education facilities such as an auditorium and clinical teaching areas, and an enhanced library/learning resources center.

"As a community-integrated medical school, Marshall has enjoyed extraordinary support from its three major affiliate hospitals over the years," Dr. McKown said. "With this offer, Cabell Huntington Hospital has again demonstrated its intense concern for the health of citizens in our region and for top-quality medical education.

"This is a once-in-a-lifetime opportunity for our School of Medicine, and Cabell Huntington President Don Smith has told me he wants to make certain the center meets our long-term needs as well as our immediate ones," Dr. McKown said. "This will truly be a state-of-the-art facility, and we are deeply grateful to the hospital and its board for making it possible."

W. Don Smith, president and CEO of Cabell Huntington Hospital, said his organization is looking forward to the cooperative venture.

"By providing the $3 million of seed money for this project in 1987, Cabell Huntington Hospital illustrated its support for medical education in Huntington," Smith said. "We already are actively involved in residencies in family practice, pediatrics, pathology and surgery, and we believe supporting the medical school by providing an ambulatory care facility is an essential step for the continued development of the medical school."

Dr. McKown said the center will lead to new and expanded services. "This clearly will allow us to provide the public with invigorated clinical services," he said. "It also opens the door to long-term partnerships with community organizations to meet special needs. Consolidating our Huntington services will allow our physicians to use their time more effectively and, more important, it will allow us to serve our patients better," he added.

The move will free up additional laboratory space at the 86,743-square-foot Doctors' Memorial Building for the school's thriving research program.

Marshall will continue its affiliations with St. Mary's Hospital and the VA Medical Center.

DeMesquita honored for scientific accomplishments

DeMesquita

Susan DeMesquita, Ph.D., associate professor of physiology, was honored for her scientific achievement at West Virginia's eighth annual Celebrate Women Awards presentation.

Dr. DeMesquita, who studies the neurophysiology of sleep, directs the only sleep research laboratory in the state. She is a founding member of the West Virginia Chapter of the Association for Women in Science, of which she is president.

Dr. DeMesquita said she hopes the award will encourage other women to enter science careers.

"We need to look young women in the eye and say, 'You *can* be a doctor — or a physiologist, or an engineer,'" she said. "And we need to tell their parents, too."

Since 1983, Dr. DeMesquita has participated in the Minority High School Apprentice Program, which encourages young West Virginians to pursue a science career. She joined the faculty in 1977 and is an associate professor of physiology.

Three students, resident earn awards at Research Day

Three students and a resident were honored during the Fifth Annual Research Day on March 31.

Todd Gress, MS II, and former resident Syed Samad tied for the Lester R. Bryant Award. Gress's clinical science presentation was "Practice Variation in the Pharmacologic Therapy of Acute Myocardial Infarction in a Private Hospital." Samad's clinical poster presentation was entitled "Enteropathy in the Acquired Immunodeficiency Syndrome."

In the clinical science category, Linda G. Brown won for "An Unusual Case of Trichotillomania." Lee A. Mullens, an undergraduate student, won the basic science category with her poster presentation, "Neuropeptide and Catecholamine Neurons of the Nucleus of the Solitary Tract Project to the Parabrachial Nucleus."

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AIR FORCE

Medical Student News

Public hearing to be held to discuss proposed changes in *Functions and Structure of a Medical School*

Editor's Note: *If you would like to contribute an article for this page, please contact Nancy Hill, managing editor, at 925-0342.*

The Liaison Committee on Medical Education (LCME), the nationally recognized body which accredits programs leading to the M.D. degree, will hold a hearing on Saturday, June 20 at 3:30 p.m. at the Chicago Hilton and Towers Hotel in Chicago to discuss the six proposal changes in accreditation standards published in *Functions and Structure of a Medical School*. All interested parties, groups and individuals are invited to attend.

A description of the six changes begins below and material to be added is underlined and material to be deleted is contained in parentheses. The relevant sections from *Functions and Structure of a Medical School* are included, with the locations of the proposed changes indicated by numbers in the text.

1. ADMINISTRATION
p. 12
Geographically Separated (Campuses) Programs

If components of the program are conducted at sites geographically separated from the main campus of the medical school, the chief academic officer (administration) of the medical school must be (fully) responsible for the conduct (,) and maintenance of quality of the educational experiences offered at these sites and for the identification of the faculty at all sites. (In order to ensure that all educational components of the school's program are equivalent in quality), The principal academic officer of each geographically separated site must be administratively responsible to the chief academic officer of the medical school conducting the accredited program. (Similarly,) The faculty in each discipline, in all sites, must be functionally integrated by administrative mechanisms that ensure comparable quality in the educational experiences and consistency in student evaluation at (of) the geographically separated segments of the program.

2. EDUCATIONAL PROGRAM FOR THE M.D. DEGREE
Content (p. 13)
[this paragraph replaces the existing paragraph that begins, "The traditional required clinical subjects..."]

Schools must offer clinical education programs that equip students with the knowledge, skills, attitudes and behaviors necessary for further training in the practice of medicine. Instruction and experience in patient care must be provided in both ambulatory and hospital settings Education in the generalist/primary care specialities should include experience in disciplines such as family medicine, general internal medicine and general pediatrics. Clinical instruction should cover all organ systems and must include the important aspects of acute, chronic, continuing, preventive and rehabilitative care.

3. EDUCATIONAL PROGRAM FOR THE M.D. DEGREE
Evaluation of Student Achievement/Due Process (p. 14)

...There should be a fair and relatively formal process for the faculty or administration to follow when taking any action that adversely affects the status of a student. The process should include timely notice of the impending action, disclosure of the evidence on which the action would be based, and an opportunity for the student to respond. A student's records...

4. MEDICAL STUDENTS
Transfer Students (p. 15)

Transfer students may be accepted into the middle years of the curriculum but must not be accepted into the final year of the program except under rare circumstances. (The LCME must be notified concerning each transfer into the final year of the curriculum, the reason for the transfer, and the school from which the student transferred.) Students accepted for transfer...

5. RESOURCES FOR THE EDUCATION PROGRAM
Finances (p. 17)

...and appropriations by government. Undue pressure for institutional self-financing must not compromise the educational mission of the medical school. Dependence upon tuition must not cause schools to seek enrollment of more students than their resources can accommodate.

6. RESOURCES FOR THE EDUCATIONAL PROGRAM
Faculty (p. 17)

...otherwise become acquainted with medical school policies and practices.

A medical school should have policies which deal with circumstances in which the private interests of its faculty or staff may conflict with their official responsibilities.

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‡Verapamil should be administered cautiously to patients with impaired renal function.

References: 1. Data on file, Searle. 2. Edmonds D, Würth JP, Baumgart P, et al. Twenty-four-hour monitoring of blood pressure during calcium antagonist therapy. In: Fleckenstein A, Laragh SH, eds. *Hypertension—the Next Decade: Verapamil in Focus*. New York, NY: Churchill Livingstone; 1987:94-100. 3. Midtbø KA. Effects of long-term verapamil therapy on serum lipids and other metabolic parameters. *Am J Cardiol*. 1990;66:131-151. 4. Fagher B, Henningsen N, Hulthén L, et al. Antihypertensive and renal effects of enalapril and slow-release verapamil in essential hypertension. *Eur J Clin Pharmacol*. 1990;39(suppl 1):S41-S43. 5. Schmieder RE, Messerli FH, Garavaglia GE, et al. Cardiovascular effects of verapamil in patients with essential hypertension. *Circulation*. 1987;75:1030-1036. 6. Midtbø K, Lauve O, Hals O. No metabolic side effects of long-term treatment with verapamil in hypertension. *Angiology*. 1988;39:1025-1029.

BRIEF SUMMARY

Contraindications: Severe LV dysfunction (see *Warnings*), hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no pacemaker is present), 2nd- or 3rd-degree AV block (if no pacemaker is present), atrial flutter/fibrillation with an accessory bypass tract (eg, WPW or LGL syndromes), hypersensitivity to verapamil.

Warnings: Verapamil should be avoided in patients with severe LV dysfunction (eg, ejection fraction < 30%) or moderate to severe symptoms of cardiac failure and in patients with any degree of ventricular dysfunction if they are receiving a beta-blocker. Control milder heart failure with optimum digitalization and/or diuretics before Calan SR is used. Verapamil may occasionally produce hypotension. Elevations of liver enzymes have been reported. Several cases have been demonstrated to be produced by verapamil. Periodic monitoring of liver function in patients on verapamil is prudent. Some patients with paroxysmal and/or chronic atrial flutter/fibrillation and an accessory AV pathway (eg, WPW or LGL syndromes) have developed an increased antegrade conduction across the accessory pathway bypassing the AV node, producing a very rapid ventricular response or ventricular fibrillation after receiving I.V. verapamil (or digitalis). Because of this risk, oral verapamil is contraindicated in such patients. AV block may occur (2nd- and 3rd-degree, 0.8%). Development of marked 1st-degree block or progression to 2nd- or 3rd-degree block requires reduction in dosage or, rarely, discontinuation and institution of appropriate therapy. Sinus bradycardia, 2nd-degree AV block, sinus arrest, pulmonary edema and/or severe hypotension were seen in some critically ill patients with hypertrophic cardiomyopathy who were treated with verapamil.

Precautions: Verapamil should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdosage. Verapamil may decrease neuromuscular transmission in patients with Duchenne's muscular dystrophy and may prolong recovery from the neuromuscular blocking agent vecuronium. It may be necessary to decrease verapamil dosage in patients with attenuated neuromuscular transmission. Combined therapy with beta-adrenergic blockers and verapamil may result in additive negative effects on heart rate, atrioventricular conduction and/or cardiac contractility; there have been reports of excessive bradycardia and AV block, including complete heart block. The risks of such combined therapy may outweigh the benefits. The combination should be used only with caution and close monitoring. Decreased metoprolol and propranolol clearance may occur when either drug is administered concomitantly with verapamil. A variable effect has been seen with combined use of atenolol. Chronic verapamil treatment can increase serum digoxin levels by 50% to 75% during the first week of therapy, which can result in digitalis toxicity. In patients with hepatic cirrhosis, verapamil may reduce total body clearance and extrarenal clearance of digitoxin. The digoxin dose should be reduced when verapamil is given, and the patient carefully monitored. Verapamil will usually have an additive effect in patients receiving blood-pressure-lowering agents. Disopyramide should not be given within 48 hours before or 24 hours after verapamil administration. Concomitant use of flecainide and verapamil may have additive effects on myocardial contractility, AV conduction, and repolarization. Combined verapamil and quinidine therapy in patients with hypertrophic cardiomyopathy should be avoided, since significant hypotension may result. Concomitant use of lithium and verapamil may result in a lowering of serum lithium levels or increased sensitivity to lithium. Patients receiving both drugs must be monitored carefully. Verapamil may increase carbamazepine concentrations during combined use. Rifampin may reduce verapamil bioavailability. Phenobarbital may increase verapamil clearance. Verapamil may increase serum levels of cyclosporin. Verapamil may inhibit the clearance and increase the plasma levels of theophylline. Concomitant use of inhalation anesthetics and calcium antagonists needs careful titration to avoid excessive cardiovascular depression. Verapamil may potentiate the activity of neuromuscular blocking agents (curare-like and depolarizing); dosage reduction may be required. There was no evidence of a carcinogenic potential of verapamil administered to rats for 2 years. A study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. Pregnancy Category C. There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. Verapamil is excreted in breast milk; therefore, nursing should be discontinued during verapamil use.

Adverse Reactions: Constipation (7.3%), dizziness (3.3%), nausea (2.7%), hypotension (2.5%), headache (2.2%), edema (1.9%), CHF, pulmonary edema (1.8%), fatigue (1.7%), dyspnea (1.4%), bradycardia: HR < 50/min (1.4%), AV block: total 1°,2°,3° (1.2%), 2° and 3° (0.8%), rash (1.2%), flushing (0.6%), elevated liver enzymes, reversible non-obstructive paralytic ileus. The following reactions, reported in 1.0% or less of patients, occurred under conditions where a causal relationship is uncertain: angina pectoris, atrioventricular dissociation, chest pain, claudication, myocardial infarction, palpitations, purpura (vasculitis), syncope, diarrhea, dry mouth, gastrointestinal distress, gingival hyperplasia, ecchymosis or bruising, cerebrovascular accident, confusion, equilibrium disorders, insomnia, muscle cramps, paresthesia, psychotic symptoms, shakiness, somnolence, arthralgia and rash, exanthema, hair loss, hyperkeratosis, macules, sweating, urticaria, Stevens-Johnson syndrome, erythema multiforme, blurred vision, gynecomastia, galactorrhea/hyperprolactinemia, increased urination, spotty menstruation, impotence.

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Nobody said the journey would be easy.

ONG AGO, FOUR SISTERS OF THE PALLOTTINE ORDER LEFT THEIR NATIVE GERMANY FOR A NEW MISSION IN AMERICA. THE JOURNEY WAS MARKED BY MISHAPS AND DELAYS, BEGINNING WHEN THE SISTERS MISSED THEIR SCHEDULED SHIP. DAYS LATER, THEY SAILED THROUGH THE WRECKAGE OF THAT SHIP, THE TITANIC.

THE YEARS AHEAD WERE HARD. BUT FAITH AND DEDICATION SUSTAINED THE

SISTERS, LED THEM TO WEST VIRGINIA, AND INSPIRED HUNTINGTON'S EARLY MEDICAL COMMUNITY. TOGETHER THEY CREATED A HEALING TRADITION, ST. MARY'S HOSPITAL.

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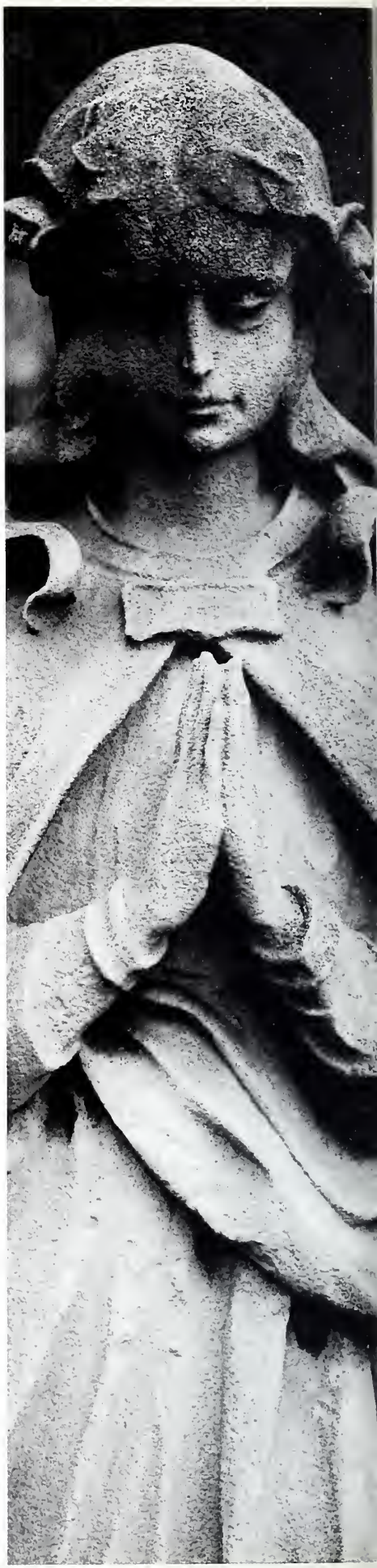
HONOR OF THE ORIGINAL JOURNEY OF THE PALLOTTINE SISTERS, WHICH BEGAN IN THE PORT CITY OF BREMERHAVEN.

WHEN PERSONAL JOURNEYS RUN OFF COURSE, LOOK TO BREMERHAVEN AT ST. MARY'S.



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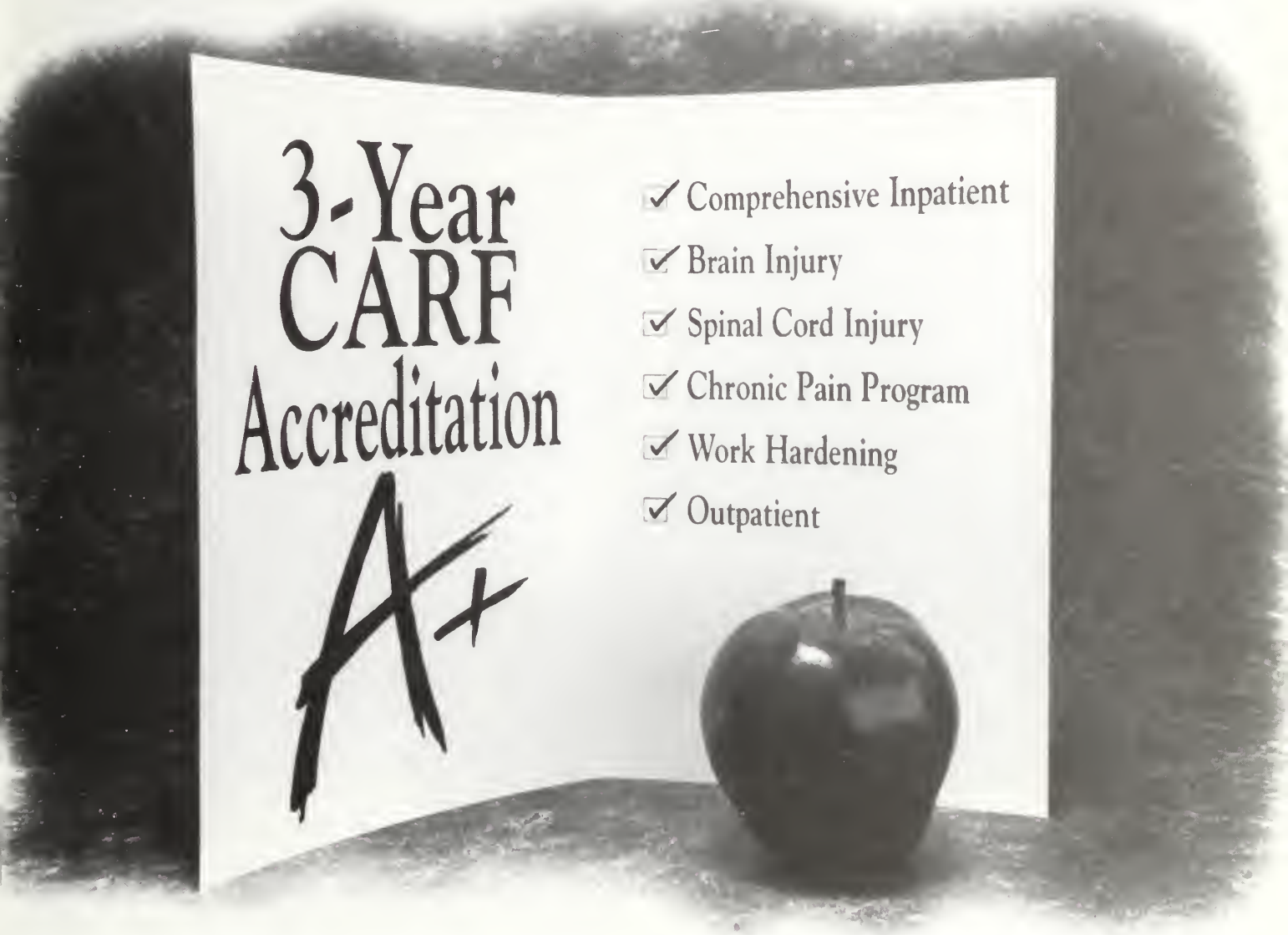

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Front Cover

A breathtaking view of Blackwater Falls from one of the hiking trails at Blackwater Falls State Park in Tucker County. Photo courtesy of *Stephen J. Shaluta Jr., West Virginia Division of Tourism and Parks.*

Covering the uninsured: No-frills insurance comes to West Virginia

HANLEY C. CLARK
West Virginia Insurance Commissioner

No one is more aware of our state's health care crisis than its physicians since an estimated 350,000 West Virginians currently have no health insurance. These people can only hope that they will be lucky enough to avoid a financially devastating illness in their lifetime.

The high cost of health insurance has been identified as the number one reason people go without coverage. Realizing this, the 1991 Legislature attacked the problem by creating the West Virginia minimum benefit accident and sickness insurance policy. The Insurance Department developed a basic policy with the help of hospitals, physicians, insurance companies, agents, small business and consumers.

Our goal was to design an affordable product that would best fit the needs of the people buying it. We sent a survey to small businesses throughout West Virginia to find out which benefits would be most important to them. Based on those results, we developed the following catastrophic policy to protect individuals from costly expenses due to major illnesses and injuries:

Inpatient hospitalization - Includes 30 days per year, with a maximum of one medical visit per inpatient day.

Outpatient services - Includes surgery, anesthesia, preadmission testing, radiation, and chemotherapy (does not include routine diagnostic testing).

Maternity Coverage - Includes prenatal care and delivery.

Emergency Care - Emergencies are covered if the condition can be defined as a non-occupational accidental injury or illness whose symptoms are of sufficient severity that, if medical attention is not provided within 72 hours, could reasonably be expected to result in an immediate or delayed threat to life, a prolonged hospitalization or an organ or body part not returning to full, normal function. Any injury that meets these criteria will be covered. An illness will be covered as an emergency only if if meets the above criteria and results in the patient's subsequent admission to the hospital.

Newborn Infant Care - Covers four office visits during the first 12 months of life.

Insurance companies are in the process of developing their policies and should be ready to market them by July, so we felt it was very important to publish this article now.

In order to maintain the low rates (the Insurance Department is projecting approximately $40/month for an individual; $120/month for a family), we are asking our state's physicians to accept 50 percent of usual and customary charges from no-frills patients, without billing them for any remaining charges. The reimbursement rate will be based on the HIAA reasonable and customary schedule. All payments for services under the plan will be sent directly to the physician.

Physicians have been treating uninsured patients for years, but have received little or no compensation for their services. The no-frills plan would allow doctors to be partially compensated for services that were once written off as charity care.

The Insurance Department is also asking hospitals to accept a lower reimbursement rate and waive inpatient deductibles. After positive discussions with the West Virginia Hospital Association, we expect their full cooperation.

Only those policyholders whose incomes fall below specified levels will qualify to have their co-payments and deductibles waived.

The law has provided safeguards to ensure that only those who truly need no-frills coverage will qualify for it. Individuals and employer groups must certify that they have been without insurance for at least one year to purchase a policy. This restriction will prevent people, attracted by low rates, from cancelling their standard coverage and buying a no-frills plan.

West Virginia's no-frills plan has the potential to serve as a model for the entire nation. It will allow lower-income citizens to pay for their own health care without having to rely on providers' charity. Physicians will recover reimbursement for services once written off, and, ultimately, less cost will be shifted to other privately insured patients.

The success of the no-frills program depends largely on physicians. Please support this innovative effort to improve our health care system. The Insurance Department will soon be contacting individual hospitals and their medical staffs to seek their support.

For further information, contact George Rider, West Virginia State Medical Association, at 925-0342, or Carol Warder, West Virginia Department of Insurance at 558-3394.

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Parke-Davis is confident that for many of your hypertensive patients ACCUPRIL will achieve the decrease in blood pressure you expect.

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ACCUPRIL®™

quinapril HCl tablets 10, 20, 40 mg

* See DOSAGE AND ADMINISTRATION section of prescribing information.

† If, after an adequate trial of ACCUPRIL alone, based on your medical judgment as the prescribing physician, you determine that your patient requires the addition of a diuretic, Parke-Davis will refund to the patient his/her cost for the diuretic prescription less any amount reimbursed or paid for by an HMO, insurance company, or any other plan or program.

For more details, ask your Parke-Davis Representative or call 1-800-955-3077.

‡ In some patients, the antihypertensive effect may diminish toward the end of the once-daily dosing interval. In such patients, an increase in dosage or twice-daily administration may be warranted.

ACCUPRIL is available in 10, 20, and 40 mg tablets. Usual initial starting dosage is 10 mg once daily.

ACCUPRIL is contraindicated in patients who are hypersensitive to this product and in patients with a history of angioedema related to previous treatment with an ACE inhibitor.

Please see brief summary of prescribing information on following page.

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USE IN PREGNANCY
When used in pregnancy during the second and third trimesters, ACE inhibitors can cause injury and even death to the developing fetus. When pregnancy is detected, ACCUPRIL should be discontinued as soon as possible. See WARNINGS, Fetal/Neonatal Morbidity and Mortality.

Before prescribing, please see full prescribing information. A brief summary follows.

INDICATIONS AND USAGE
ACCUPRIL is indicated for the treatment of hypertension. It may be used alone or in combination with thiazide diuretics.

In using ACCUPRIL, consideration should be given to the fact that another angiotensin-converting enzyme (ACE) inhibitor, captopril, has caused agranulocytosis, particularly in patients with renal impairment or collagen vascular disease. Available data are insufficient to show that ACCUPRIL does not have a similar risk (see WARNINGS).

CONTRAINDICATIONS
ACCUPRIL is contraindicated in patients who are hypersensitive to this product and in patients with a history of angioedema related to previous treatment with an ACE inhibitor.

WARNINGS
Angioedema: Angioedema of the face, extremities, lips, tongue, glottis, and larynx has been reported in patients treated with ACE inhibitors and has been seen in 0.1% of patients receiving ACCUPRIL. Angioedema associated with laryngeal edema can be fatal. If laryngeal stridor or angioedema of the face, tongue, or glottis occurs, treatment with ACCUPRIL should be discontinued immediately, the patient treated in accordance with accepted medical care, and carefully observed until the swelling disappears. In instances where swelling is confined to the face and lips, the condition generally resolves without treatment; antihistamines may be useful in relieving symptoms. **Where there is involvement of the tongue, glottis, or larynx likely to cause airway obstruction, emergency therapy including, but not limited to, subcutaneous epinephrine solution 1:1000 (0.3 to 0.5 mL) should be promptly administered (see ADVERSE REACTIONS).**

Hypotension: Symptomatic hypotension was rarely seen in uncomplicated hypertensive patients treated with ACCUPRIL but, as with other ACE inhibitors, it is a possible consequence of therapy in salt/volume depleted patients, such as those previously treated with diuretics or dietary salt restriction or who are on dialysis (see PRECAUTIONS, DRUG INTERACTIONS, and ADVERSE REACTIONS). In controlled studies, syncope was observed in 0.4% of patients (N = 3203); this incidence was similar to that observed for captopril (1%) and enalapril (0.8%).

In patients with concomitant congestive heart failure, with or without associated renal insufficiency, ACE inhibitor therapy may cause excessive hypotension, which may be associated with oliguria or azotemia and, rarely, with acute renal failure and death. In such patients, ACCUPRIL therapy should be started at the recommended dose under close medical supervision. These patients should be followed closely for the first 2 weeks of treatment and whenever the dosage of antihypertensive medication is increased (see DOSAGE AND ADMINISTRATION).

If symptomatic hypotension occurs, the patient should be placed in the supine position and, if necessary, normal saline may be administered intravenously. A transient hypotensive response is not a contraindication to further doses; however, lower doses of ACCUPRIL or reduced concomitant diuretic therapy should be considered.

Neutropenia/Agranulocytosis: Another ACE inhibitor, captopril, has been shown to cause agranulocytosis and bone marrow depression rarely in patients with uncomplicated hypertension, but more frequently in patients with renal impairment, especially if they also have a collagen vascular disease such as systemic lupus erythematosus or scleroderma. Agranulocytosis did occur during ACCUPRIL treatment in one patient with a history of neutropenia during previous captopril therapy. Available data from clinical trials of ACCUPRIL are insufficient to show that, in patients without prior reactions to other ACE inhibitors, ACCUPRIL does not cause agranulocytosis at similar rates. As with other ACE inhibitors, periodic monitoring of white blood cell counts in patients with collagen vascular disease and/or renal disease should be considered.

Fetal/Neonatal Morbidity and Mortality: ACE inhibitors can cause fetal and neonatal morbidity and death when administered to pregnant women. Several dozen cases have been reported in the world literature. When pregnancy is detected, ACE inhibitors should be discontinued as soon as possible.

The use of ACE inhibitors during the second and third trimesters of pregnancy has been associated with fetal and neonatal injury, including hypotension, neonatal skull hypoplasia, anuria, reversible or irreversible renal failure, and death. Oligohydramnios has also been reported, presumably resulting from decreased fetal renal function; oligohydramnios in this setting has been associated with fetal limb contractures, craniofacial deformation, and hypoplastic lung development. Prematurity, intrauterine growth retardation, and patent ductus arteriosus have also been reported, although it is not clear whether these occurrences were due to the ACE inhibitor exposure.

These adverse effects do not appear to have resulted from intrauterine ACE inhibitor exposure that has been limited to the first trimester. Mothers whose embryos and fetuses are exposed to ACE inhibitors only during the first trimester should be so informed. Nonetheless, when patients become pregnant, physicians should make every effort to discontinue the use of ACCUPRIL as soon as possible.

Rarely (probably less often than once in every thousand pregnancies), no alternative to ACE inhibitors will be found. In these rare cases, the mothers should be apprised of the potential hazards to their fetuses, and serial ultrasound examinations should be performed to assess the intraamniotic environment.

If oligohydramnios is observed, ACCUPRIL should be discontinued unless it is considered life-saving for the mother. Contraction stress testing (CST), a non-stress test (NST), or biophysical profiling (BPP) may be appropriate, depending upon the week of pregnancy. Patients and physicians should be aware, however, that oligohydramnios may not appear until after the fetus has sustained irreversible injury.

Infants with histories of *in utero* exposure to ACE inhibitors should be closely observed for hypotension, oliguria, and hyperkalemia. If oliguria occurs, attention should be directed toward support of blood pressure and renal perfusion. Exchange transfusion or dialysis may be required as a means of reversing hypotension and/or substituting for disordered renal function. Removal of ACCUPRIL, which crosses the placenta, from the neonatal circulation is not significantly accelerated by these means.

No teratogenic effects of ACCUPRIL were seen in studies of pregnant rats and rabbits. On a mg/kg basis, the doses used were up to 180 times (in rats) and one time (in rabbits) the maximum recommended human dose.

PRECAUTIONS
General
Impaired renal function: As a consequence of inhibiting the renin-angiotensin-aldosterone system, changes in renal function may be anticipated in susceptible individuals. In patients with severe heart failure whose renal function may depend on the activity of the renin-angiotensin-aldosterone system, treatment with ACE inhibitors, including ACCUPRIL, may be associated with oliguria and/or progressive azotemia and rarely acute renal failure and/or death.

In clinical studies in hypertensive patients with unilateral or bilateral renal artery stenosis, increases in blood urea nitrogen and serum creatinine have been observed in some patients following ACE inhibitor therapy. These increases were almost always reversible upon discontinuation of the ACE inhibitor and/or diuretic therapy. In such patients, renal function should be monitored during the first few weeks of therapy.

Some hypertensive patients with no apparent preexisting renal vascular disease have developed increases in blood urea and serum creatinine, usually minor and transient, especially when ACCUPRIL has been given concomitantly with a diuretic. This is more likely to occur in patients with preexisting renal impairment. Dosage reduction and/or discontinuation of any diuretic and/or ACCUPRIL may be required.

Evaluation of hypertensive patients should always include assessment of renal function (see DOSAGE AND ADMINISTRATION).

Hyperkalemia and potassium-sparing diuretics: In clinical trials, hyperkalemia (serum potassium ≥5.8 mmol/L) occurred in approximately 2% of patients receiving ACCUPRIL. In most cases, elevated serum potassium levels were isolated values which resolved despite continued therapy. Less than 0.1% of patients discontinued therapy due to hyperkalemia. Risk factors for the development of hyperkalemia include renal insufficiency, diabetes mellitus, and the concomitant use of potassium-sparing diuretics, potassium supplements, and/or potassium-containing salt substitutes, which should be used cautiously, if at all, with ACCUPRIL (see PRECAUTIONS, Drug Interactions).

Cough: Cough has been reported with the use of ACE inhibitors. Characteristically, the cough is nonproductive, persistent, and resolves after discontinuation of therapy. ACE inhibitor-induced cough should be considered as part of the differential diagnosis of cough.

Surgery/anesthesia: In patients undergoing major surgery or during anesthesia with agents that produce hypotension, ACCUPRIL will block angiotensin II formation secondary to compensatory renin release. If hypotension occurs and is considered to be due to this mechanism, it can be corrected by volume expansion.

Information for Patients
Pregnancy: Female patients of childbearing age should be told about the consequences of second- and third-trimester exposure to ACE inhibitors, and they should also be told that these consequences do not appear to have resulted from intrauterine ACE-inhibitor exposure that has been limited to the first trimester. These patients should be asked to report pregnancies to their physicians as soon as possible.

Angioedema: Angioedema, including laryngeal edema, can occur with treatment with ACE inhibitors, especially following the first dose. Patients should be so advised and told to report immediately any signs or symptoms suggesting angioedema (swelling of face, extremities, eyes, lips, tongue, difficulty in swallowing or breathing) and to stop taking the drug until they have consulted with their physician (see WARNINGS).

Symptomatic hypotension: Patients should be cautioned that lightheadedness can occur, especially during the first few days of ACCUPRIL therapy, and that it should be reported to a physician. If actual syncope occurs, patients should be told to not take the drug until they have consulted with their physician (see WARNINGS).

All patients should be cautioned that inadequate fluid intake or excessive perspiration, diarrhea, or vomiting can lead to an excessive fall in blood pressure because of reduction in fluid volume, with the same consequences of lightheadedness and possible syncope.

Patients planning to undergo any surgery and/or anesthesia should be told to inform their physician that they are taking an ACE inhibitor.

Hyperkalemia: Patients should be told not to use potassium supplements or salt substitutes containing potassium without consulting their physician (see PRECAUTIONS).

Neutropenia: Patients should be told to report promptly any indication of infection (eg, sore throat, fever) which could be a sign of neutropenia.

NOTE: As with many other drugs, certain advice to patients being treated with ACCUPRIL is warranted. This information is intended to aid in the safe and effective use of this medication. It is not a disclosure of all possible adverse or intended effects.

Drug Interactions
Concomitant diuretic therapy: As with other ACE inhibitors, patients on diuretics, especially those on recently instituted diuretic therapy, may occasionally experience an excessive reduction of blood pressure after initiation of therapy with ACCUPRIL. The possibility of hypotensive effects with ACCUPRIL may be minimized by either discontinuing the diuretic or cautiously increasing salt intake prior to initiation of treatment with ACCUPRIL. If it is not possible to discontinue the diuretic, the starting dose of quinapril should be reduced (see DOSAGE AND ADMINISTRATION).

Agents increasing serum potassium: Quinapril can attenuate potassium loss caused by thiazide diuretics and increase serum potassium when used alone. If concomitant therapy of ACCUPRIL with potassium-sparing diuretics (eg, spironolactone, triamterene, or amiloride), potassium supplements, or potassium-containing salt substitutes is indicated, they should be used with caution along with appropriate monitoring of serum potassium (see PRECAUTIONS).

Tetracycline and other drugs that interact with magnesium: Simultaneous administration of tetracycline with ACCUPRIL reduced the absorption of tetracycline by approximately 28% to 37%, possibly due to the high magnesium content in ACCUPRIL tablets. This interaction should be considered if coprescribing ACCUPRIL and tetracycline or other drugs that interact with magnesium.

Lithium: Increased serum lithium levels and symptoms of lithium toxicity have been reported in patients receiving concomitant lithium and ACE inhibitor therapy. These drugs should be co-administered with caution, and frequent monitoring of serum lithium levels is recommended. If a diuretic is also used, it may increase the risk of lithium toxicity.

Other agents: Drug interaction studies of ACCUPRIL with other agents showed:
- Multiple dose therapy with propranolol or cimetidine has no effect on the pharmacokinetics of single doses of ACCUPRIL.
- The anticoagulant effect of a single dose of warfarin (measured by prothrombin time) was not significantly changed by quinapril coadministration twice-daily.
- ACCUPRIL treatment did not affect the pharmacokinetics of digoxin.
- No pharmacokinetic interaction was observed when single doses of ACCUPRIL and hydrochlorothiazide were administered concomitantly.

Carcinogenesis, Mutagenesis, Impairment of Fertility
Quinapril hydrochloride was not carcinogenic in mice or rats when given in doses up to 75 or 100 mg/kg/day (50 to 60 times the maximum human daily dose, respectively, on a mg/kg basis and 3.8 to 10 times the maximum human daily dose when based on a mg/m^2 basis) for 104 weeks. Female rats given the highest dose level had an increased incidence of mesenteric lymph node hemangiomas and skin/subcutaneous lipomas. Neither quinapril nor quinaprilat were mutagenic in the Ames bacterial assay with or without metabolic activation. Quinapril was also negative in the following genetic toxicology studies: *in vitro* mammalian cell point mutation, sister chromatid exchange in cultured mammalian cells, micronucleus test with mice, *in vitro chromosome* aberration with V79 cultured lung cells, and in an *in vivo* cytogenetic study with rat bone marrow. There were no adverse effects on fertility or reproduction in rats at doses up to 100 mg/kg/day (60 and 10 times the maximum daily human dose when based on mg/kg and mg/m^2, respectively).

ONCE-A-DAY*
ACCUPRIL®™
quinapril HCl tablets

Pregnancy
Pregnancy Categories C (first trimester) and D (second and third trimesters): See WARNINGS, Fetal/Neonatal Morbidity and Mortality

Nursing Mothers
It is not known if quinapril or its metabolites are secreted in human milk. Quinapril is secreted to a limited extent, however, in milk of lactating rats (5% or less of the plasma drug concentration was found in rat milk). Because many drugs are secreted in human milk, caution should be exercised when ACCUPRIL is given to a nursing mother.

Geriatric Use
Elderly patients exhibited increased area under the plasma concentration time curve (AUC) and peak levels for quinaprilat compared to values observed in younger patients; this appeared to relate to decreased renal function rather than to age itself. In controlled and uncontrolled studies of ACCUPRIL where 918 (21%) patients were 65 years and older, no overall differences in effectiveness or safety were observed between older and younger patients. However, greater sensitivity of some older individual patients cannot be ruled out.

Pediatric Use
The safety and effectiveness of ACCUPRIL in children have not been established.

ADVERSE REACTIONS
ACCUPRIL has been evaluated for safety in 4960 subjects and patients. Of these, 3203 patients, including 655 elderly patients, participated in controlled clinical trials. ACCUPRIL has been evaluated for long-term safety in over 1400 patients treated for 1 year or more.

Adverse experiences were usually mild and transient.

Discontinuation of therapy because of adverse events was required in 4.7% of patients treated with ACCUPRIL in placebo-controlled hypertension trials

Adverse experiences probably or possibly related to therapy or of unknown relationship to therapy occurring in 1% or more of the 1563 patients in placebo-controlled hypertension trials who were treated with ACCUPRIL are shown below

Adverse Events in Placebo-Controlled Trials

	ACCUPRIL (N = 1563) Incidence (Discontinuance)	Placebo (N = 579) Incidence (Discontinuance)
Headache	5.6 (0.7)	10.9 (0.7)
Dizziness	3.9 (0.8)	2.6 (0.2)
Fatigue	2.6 (0.3)	1.0
Coughing	2.0 (0.5)	0.0
Nausea/Vomiting	1.4 (0.3)	1.9 (0.2)
Abdominal Pain	1.0 (0.2)	0.7

See PRECAUTIONS, Cough.

Clinical adverse experiences probably or possibly related, or of uncertain relationship to therapy, occurring in 0.5% to 1.0% (except as noted) of the patients treated with ACCUPRIL (with or without concomitant diuretic) in controlled or uncontrolled trials (N = 4397) and less frequent, clinically significant events seen in clinical trials or post-marketing experience (the rarer events are in italics) include (listed by body system):

General: back pain, malaise

Cardiovascular: palpitation, vasodilation, tachycardia, *heart failure, hyperkalemia, myocardial infarction, cerebrovascular accident, hypertensive crisis, angina pectoris, orthostatic hypotension, cardiac rhythm disturbances*

Gastrointestinal: dry mouth or throat, constipation, *gastrointestinal hemorrhage, pancreatitis, abnormal liver function tests*

Nervous/Psychiatric: somnolence, vertigo, syncope, *nervousness, depression*

Integumentary: increased sweating, pruritus, *exfoliative dermatitis, photosensitivity reaction*

Urogenital: *acute renal failure*

Other: amblyopia, pharyngitis, sinusitis, bronchitis, *agranulocytosis, thrombocytopenia*

Fetal/Neonatal Morbidity and Mortality
See WARNINGS, Fetal/Neonatal Morbidity and Mortality.

Angioedema: angioedema has been reported in patients receiving ACCUPRIL (0.1%). Angioedema associated with laryngeal edema may be fatal. If angioedema of the face, extremities, lips, tongue, glottis, and/or larynx occurs, treatment with ACCUPRIL should be discontinued and appropriate therapy instituted immediately. (See WARNINGS.)

Clinical Laboratory Test Findings
Hematology: (See WARNINGS)
Hyperkalemia: (See PRECAUTIONS)
Creatinine and blood urea nitrogen: Increases (>1.25 times the upper limit of normal) in serum creatinine and blood urea nitrogen were observed in 2% and 2%, respectively, of patients treated with ACCUPRIL alone. Increases are more likely to occur in patients receiving concomitant diuretic therapy than in those on ACCUPRIL alone. These increases often remit on continued therapy.

*In some patients, the antihypertensive effect may diminish toward the end of the once-daily dosing interval. In such patients, an increase in dosage or twice-daily administration may be warranted.

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Health Access America

The AMA proposal to improve access to affordable, quality health care.

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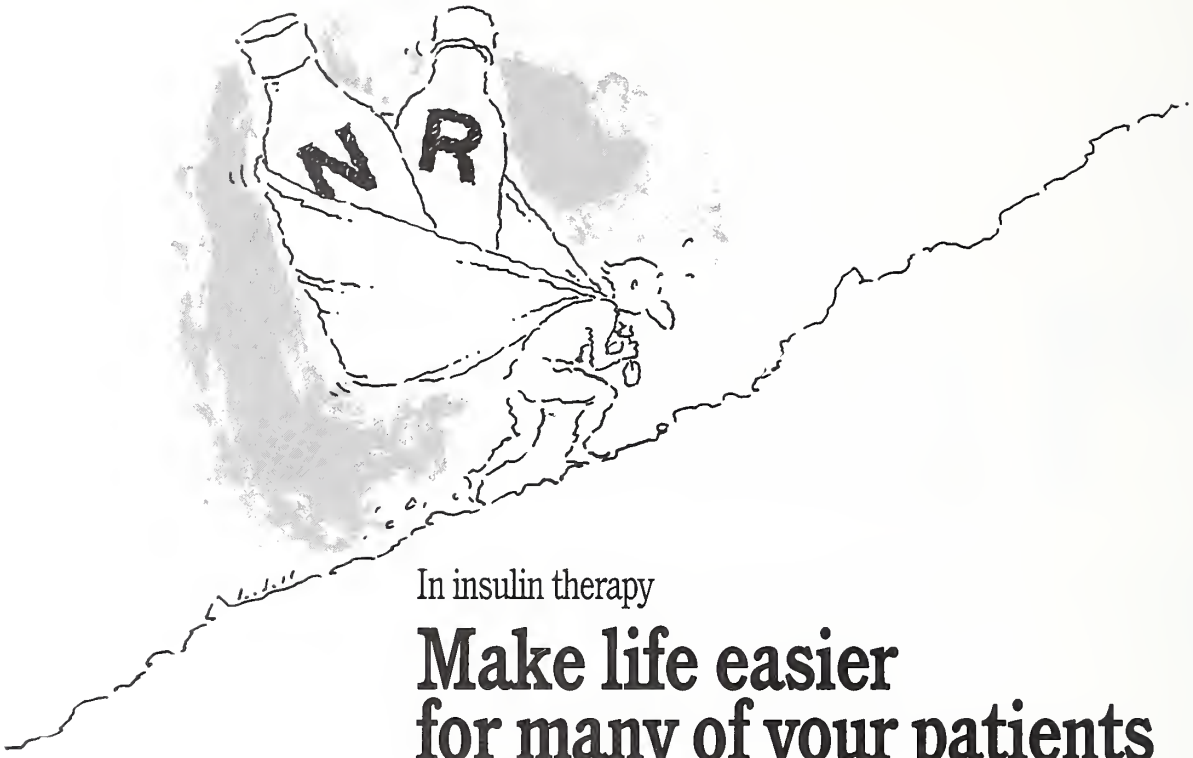

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The use of head-up tilt table testing in the evaluation of unexplained syncope

RONALD MCCOWAN, M.D.
LINDA TONE, R.N.
CLIFTON THORPE, C.V.T.
JANICE KISER, R.N.
TERRY MILLER, C.V.T.
LORI HATFIELD, R.N.
Department of Cardiology, Charleston Area Medical Center, Charleston

Abstract

Head-up tilt table testing was performed in 50 patients for evaluation of syncope. A positive test occured in 29 patients (58 percent). Of these 29 patients, 15 were categorized as vasovagal; 11 as orthostatic hypotension; and three as chronotropic incompetence. Isoproterenol facilitated the occurrence of a positive test in 13 patients. Medications were used to treat 15 of the 29 patients having a positive test result. Syncope recurred in two patients over a 9 ± 5 month follow-up period. In patients having unexplained syncope, head-up tilt table testing may provide a diagnosis and can be used to assess therapy. Earlier use of this testing modality in selected patients may obviate more expensive testing.

Introduction

Syncope, a transient loss of consciousness and muscle tone, accounts for three percent of emergency room visits and up to six percent of hospital admissions (1,2). It is due to a variety of causes including vasovagal mechanisms, cardiac arrhythmias and orthostatic hypotension. In 38 percent to 47 percent of patients, however, the cause of syncope may remain unexplained despite extensive testing (3).

Recently, head-up tilt table testing, a non-invasive and relatively inexpensive test, has provided the diagnosis and assisted in the management of a significant number of patients presenting with unexplained syncope (4,5,6). It has been utilized, primarily, as a provocative test for vasovagal type syncope. The reported sensitivity and specificity are 73 percent and 85 percent, respectively (7), and test results appear to be reproducible in 85 percent of patients when isoproterenol infusion is used (8,9). This reproducibility facilitates the use of this test in the assessment of therapy. The following report includes further experience in tilt table testing and adjunctive use of isoproterenol in the evaluation of syncope.

Methods

Between January 1990 and June 1991, 50 patients underwent head-up tilt table testing in the electrophysiology laboratory at Charleston Area Medical Center for evaluation of syncope. There were 32 males and 18 females; mean age 50 ± 20 years (range 15 years - 88 years). Heart disease was known to be present in 12 patients (24 percent) and included coronary disease (7), cardiomyopathy (4), and mitral valve prolapse (1). Left ventricular ejection fractions were available in 40 patients and measured 54 ± 10 percent (25 percent to 70 percent). Thirty-nine patients (78 percent) had a history of two or more syncopal episodes (7 ± 8, range 2 to 40), nine patients (18 percent) had one syncopal event, and two patients (four percent) had recurrent presyncope.

Electrophysiologic studies (EPS) were performed in 25 patients (50 percent). The findings were thought to be the cause of syncope in only two patients (eight percent). One patient had atrioventricular conduction system disease requiring permanent pacemaker implantation, while the other patient had induced sustained ventricular tachycardia. The EPS procedure used at the CAMC has been previously described (10).

Tilt Test. The tilt tests were performed after a four-hour fast. Following a 15-minute supine stabilization period, a screening tilt was performed in which the patients were tilted head-up to 80 degrees on a motorized table with a foot board. If no symptomatic hypotension or bradycardia occurred, a second tilt was performed after a five-minute supine period during which isoproterenol was infused, via a peripheral vein, at 1 ug/minute.

Third and fourth tilts were performed in a similar fashion and with isoproterenol being infused at 2 ug/minute - 5 ug/minute. Peripheral blood pressures by sphygmomanometry and pulse rates were sampled each minute while a continuous rhythm strip was recorded. In addition, one patient had temporary transvenous pacing catheters placed for atrioventricular pacing during the tilt test to determine if permanent pacemaker implantation would assist in preventing syncope (11).

In 15 patients, serum catecholamine levels were sampled during the supine stabilization period as well as during the seventh minute of the screening tilt. These levels were sampled to assess their utility in evaluating the mechanism of a positive tilt test. Normally, the serum level of these hormones rise with the assumption of an upright posture. Patients having certain types of autonomic insufficiency (e.g., the Shy Drager and idiopathic orthostatic hypotension syndromes), may have abnormal heart rate, blood pressure, and hormonal responses to changes in posture (12).

Statistical evaluation comprised a comparison of means using the t-test in a CoStat statistical package (13). P values of <0.05 were considered significant.

Definitions

A positive tilt test was defined as one in which symptomatic hypotension and/or bradycardia occurred with or without isoproterenol infusion. Recreation of the patients clinical symptoms was sought during the tilt test. The particular combination of heart rate and blood pressure responses gave insight into the mechanism of the positive test.

A vasovagal type mechanism was defined as a sudden decrease in both systolic blood pressure and heart rate with associated syncope or near-syncope. Orthostatic hypotension was present when a >20 mmHg decrease in systolic blood pressure was accompanied by an increase in heart rate. Chronotropic incompetence was diagnosed when a symptomatic >20 mmHg fall in systolic blood pressure occurred with a <10 beats/minute (bpm) increase in heart rate.

Results

Of the 50 patients undergoing head-up tilt testing, 29 patients (58 percent) had a positive tilt test. The mechanisms of the positive tilt was thought to be vasovagal in 15 patients (52 percent), orthostatic hypotension in 11 patients (38 percent), and chronotropic incompetence in three patients (10 percent). Two patients had symptoms of near syncope with no associated changes in heart rate or blood pressure. Nineteen patients (38 percent) had a negative tilt test despite an isoproterenol infusion.

Isoproterenol was utilized in testing 27 of the 50 patients. The infusion assisted bringing about a positive result in 13 patients (48 percent). Eight of 15 patients (53 percent) having vasovagal responses and five of 11 patients (45 percent) having orthostatic hypotension required isoproterenol for a positive tilt test. The mean isoproterenol dose used in facilitating a positive test was 3 ug./min. This dose was well tolerated in the majority of patients, although the infusion had to be discontinued in one patient due to nausea and vomiting.

The mean systolic blood pressure (BP) and heart rate (HR) changes occurring during a positive tilt test were compared with resting BP and HR measurements. In the patients having orthostatic hypotension, the initial BP measured 114 ± 14 mmHg and decreased to 77 ± 10 mmHg (p=<.001), while the starting HR was 94 ± 19 bpm and increased to 128 ± 18 bpm (p=<.001). The patients exhibiting chronotropic incompetence had an initial BP of 120 ± 11mmHg which decreased to 63 ± 12 mmHg (p=.004). The initial HR in this group measured 71 ± 7 bpm and showed no significant change (77 ± 1, p=.27) during the tilt test. The mean BP and HR changes in the patients having a vasovagal type response were an initial BP of 125 ± 16 mmHg which decreased to 56 ± 31 mmHg (p=.035) and a HR change of 105 ± 38 bpm to 33 ± 35 bpm (p=<.001).

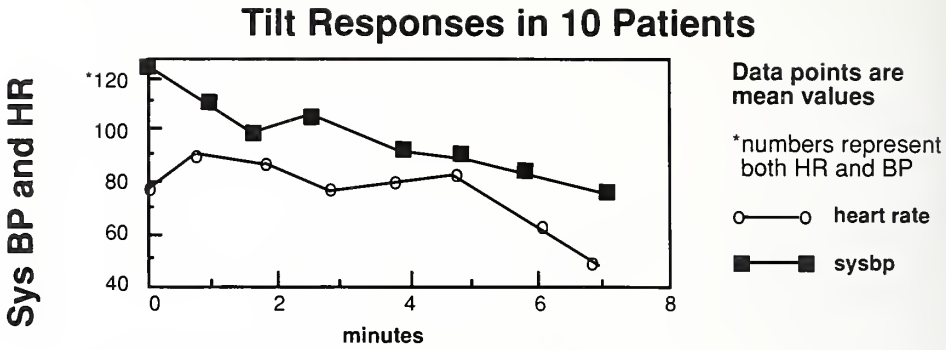

FIGURE: Patients with vasovagal type responses are shown.

The figure shows the mean HR and BP responses in 10 of the 15 patients having vasovagal type responses to the tilt test. Only four of these patients required isoproterenol for induction of a vasovagal event. The onset of BP and HR abnormalities occurred at 4 ± 2 minutes (2 minutes to 7 minutes) in the entire group except in one patient in which these changes occurred 16 minutes after beginning the tilt test.

The heart rhythm was sinus during the positive tilt test event except in four patients in which asystole (four seconds, eight seconds, 13 seconds, and 26 seconds) occurred. One additional patient developed rapid atrial flutter with a ventricular rate of 208 bpm, however, this re-created the patients clinical symptoms and was therefore considered a helpful finding. The patient undergoing artificial atrioventricular sequential pacing during tilt testing did not have prevention of hypotension, but developed near syncope despite maintenance of a heart rate of 95 beats/minute.

Serum norepinephrine levels increased from a mean of 476 ± 263 picograms/milliliter (pg/ml) to 749 ± 464 pg/ml (p=0.2) in seven patients who had a positive tilt test while the epinephrine levels increased from 39 ± 26 pg/ml to 111 ± 106 pg/ml (p=0.1). Although there was an increase in these levels, the changes did not reach statistical significance. The positive tilt responses were vasovagal in two patients, orthostatic hypotension in four patients, and chronotropic incompetence in one patient. The serum catecholamine levels did not differentiate between patients having a positive or negative tilt test result.

Treatment for vasovagal type positive tilt test results included disopyramide (four patients), atenolol (three patients), and methscopolamine (three patients). Three additional patients were treated with metoprolol, scopolamine skin patch, or fludrohydrocortisone. Two patients did not receive treatment due to the infrequency of their symptoms. Of the seven patients who had repeat tilt tests to assess the efficacy of treatment, a positive tilt occurred in two.

The follow-up period of the 15 patients having a vasovagal type response to the tilt test has been 9 ± 5 months (range one to 17). Syncope has recurred in two patients, one of whom had a positive repeat tilt while under treatment. This patient also had Parkinson's disease which may have played a role in his recurrence of syncope.

The follow-up of eight of the 11 patients with an orthostatic hypotension response has been 10 ± 5 months. None of these patients have had recurrent syncope. Two patients were treated with fludrohydrocortisone, while the other patients had intravascular volume expansion and liberalized salt intake. Follow up was available for two of the three patients having chrontropic incompetence. These patients had not had recurrent syncope after five months and were not taking medications to prevent syncope.

Discussion

Syncope is a relatively common problem in which the determination of the cause may be rather expensive, time consuming, and elusive. Vasovagal mechanisms appear to be responsible for approximately 29 percent of syncopal episodes, while orthostatic hypotension accounts for up to nine percent of these events (1). In the evaluation of these two entities, tilt table testing may provide a diagnosis and assist in selection and assessment of therapeutic options.

Upright posture provides the stimulus for the induction of vasovagal type syncope by allowing venous pooling in the legs with a resultant decrease in blood return to the heart. Cardiac output is maintained by an increase in heart rate and contractility, as well as, a rise in serum vasopressin, aldosterone, and renin. This increase in heart rate and contractility may result in activation of mechanoreceptors located in the inferior posterior segment of the left ventricle, which results in augmentation of afferent vagal signals to the brainstem. There is a subsequent increase in parasympathetic and a decrease in sympathetic tone leading to a significant decline in blood pressure and heart rate. Syncope may then occur. These alterations in autonomic tone comprise the Bezold-Jarisch reflex (14). Intravenous isoproterenol may facilitate a positive tilt test by increasing heart rate and myocardial contractility.

In this report, 29 of 50 patients had a positive tilt test result. The treatment of two additional patients having symptoms in the absence of heart rate and blood pressure abnormalities was assisted by the tilt test. These patients were subsequently evaluated for the presence of panic attack or otherpsychiatric disorder.

The use of isoproterenol was associated with adverse affects in one patient. This patient developed nausea and vomiting requiring termination of the infusion. In general, isoproterenol was well tolerated. Moreover, the use of isoproterenol assisted in bringing about a positive test in 13 or 27 patients (48 percent) in which the drug was used.

Patients with vasovagal type syncope may have exaggerated serum epinephrine elevations during tilt testing compared to control patients (15). Epinephrine levels could not be used to differentiate patients with abnormal tilt responses from those with negative tilt tests in our patient group. This may have been related to the limited number of patients tested.

The commonest mechanism of a positive tilt test was vasovagal. The treatment of these patients included a variety of medications. Beta blockers and disopyramide are thought to be effective in decreasing myocardial contractility with inhibition of the Bezold-Jarisch reflex. Also, the anticholinergic effects of disopyramide may play a role in counteracting parasympathetic tone. Other anticholinergic drugs such as scopolamine and methscopolamine are effective as well. Finally, theophylline and ephedrine have also been used to treat patients with vasovagal syncope.

Orthostatic hypotension was present in 38 percent of the patients having a positive tilt test in our patient group. Although the blood pressure usually drops significantly within two minutes in most patients with orthostatic hypotension (16), none of our patients presented with a fall in blood pressure within this time frame. The clinical significance of this difference is uncertain.

The management of prolonged asystole in response to tilt testing has been controversial. Some investigators advocate implantation of dual chamber pacemakers (11), but we, and others, believe that permanent pacing is usually insufficient in preventing vasovagal syncope (17). None of the four patients in our study group having asystole have had a recurrence of syncope with medical treatment over a mean follow-up period of 10 ± 5 months (3 months to 17 months). Three of these patients were treated; two with disopyramide and one with scopolamine skin patch. All four patients had negative repeat tilt tests while on therapy.

Various tilt test protocols have been utilized with different angles of tilt for different time intervals. In an effort to standardize methodology, two basic protocols have been recommended (18):

1) Patients should be tilted at 60 degrees to 80 degrees for a minimum of ≤45 minutes if isoproterenol is not to be used.

2) If isoproterenol is to be used, an initial tilt at 60 degrees to 80 degrees for at least ≤25 minutes is recommended, and if this tilt is negative then isoproterenol can be infused at 1-5ug/minute with up to three additional tilts for 10 minutes each, if required. We presently tilt patients to 80 degrees for 45 minutes. If this initial tilt test is negative, isoproterenol is infused and repeat tilt tests are performed, but only for 15-minute durations.

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Medical Grand Rounds

West Virginia University Health Sciences Center

Edited by Irma H. Ullrich, M.D., Professor of Medicine, Section of Endocrinology/Metabolism

Pyomyositis in a diabetic host

Discussant:
JEFFREY L. NEELY, M.D.
Associate Professor of Medicine,
Section of General Internal Medicine

Abstract

A case of pyomyositis in a diabetic host is presented. Pyomyositis is occurring more often and clinicians must be aware of this entity, especially in the immunocompromised host. The reasons for more frequent and severe infections in the diabetic patient are outlined.

Case presentation

D.W. is a 50-year-old Type II diabetic who came to the Emergency Department at the WVU Health Sciences Center on January 28, 1991, with complaints of left calf tenderness, left leg ecchymoses, anterior tibial pain and swelling. She was afebrile and there was no history of skin trauma.

A diagnosis of "lymphangitis" was made and she was sent home with a prescription for indomethocin (Indocin®). She returned to the Emergency Department four days later with worsening pain and swelling in the left leg. She was described as "pale and ill appearing" with a temperature of 39.4°C and a WBC of 19,400 with a left shift. She was anemic with a hemoglobin and hematocrit of 9.3 gms/dl and 27.3 percent respectively.

The patient was admitted to the Internal Medicine Service for treatment of cellulitis and was started on IV vancomycin (Vancocin®). Her blood sugar on admission was 363 mg/dl with a HCO_3 of 26. The other electrolytes were: Na=125, K=5.0, CL=88, Cr=1.6, and BUN=45. The protime was 24 seconds.

This patient's past medical history was significant for emphysema, transient ischemic attacks and coronary artery disease requiring bypass graft surgery on June 18, 1990. Four vessels were grafted using the left internal mammary artery and left saphenous vein. The CABG surgery was complicated by mediastinitis secondary to oxacillin (Prostaphlin®) resistant Staphylococcus epidermidis which required a six-week course of vancomycin and surgical debridement with a subsequent pectoralis muscle flap. Her TIA's were treated with coumadin.

Clinically, the patient showed some improvement, but continued to have fevers. Ceftriaxone (Rocephin®) and clindamycin (Cleocin®) were added to the antibiotic regimen. Initial and repeat blood cultures were negative. Venous doppler studies were negative for deep venous thrombosis and no other source for fever was found. Plain X-rays of the leg showed no evidence of osteomyelitis.

The patient developed swelling and erythema around the knee joint, but was not felt to have a septic joint. A CT scan of the leg was ordered to evaluate for a ruptured cyst or abscess in the leg. The CT scan done on February 8, 1991, showed "left knee effusion...multiple crescent-shaped areas at the margin of the subcutaneous fat and the deep fascia of muscle groups in the left lower extremity...there are several focal collections of air noted in the left lower extremity." (Figure 1.).

On day five of the admission, the orthopedic service collected 3 cc of clear, straw-colored fluid from each knee and the left anterior compartment. No gross pus was

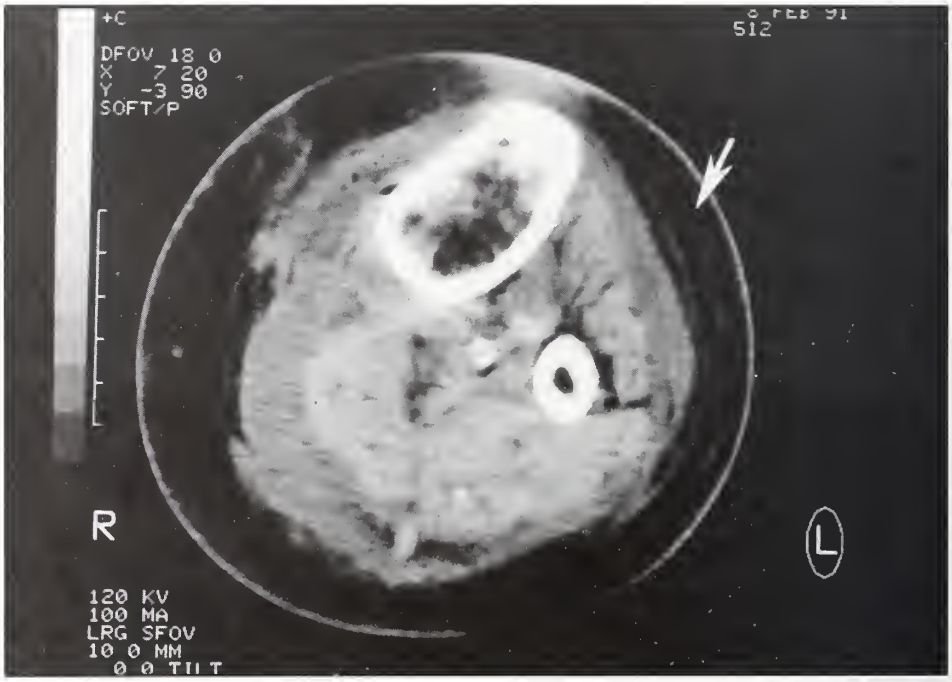

Figure 1. CT scan of the leg which shows multiple crescent shaped areas (arrow) at the margin of the subcutaneous fat and deep fascia of muscle groups. There are also several focal collections of air noted.

found. Gram stain and cultures of this fluid were negative. The CPK level remained normal.

This patient had slow improvment with almost daily temperature spikes. She elected not to have surgical exploration of the leg and on day 13, the vancomycin was stopped and the ceftriaxone and clindamycin were continued.

On February 26, she was discharged and given three more weeks of IV clindamycin and ceftriaxone. When last seen on March 22, 1991, she had no complaints of leg pain or erythema.

This case illustrates a serious problem for the clinician: the infected leg in the diabetic host. The entire spectrum of infection of the diabetic leg is of course seen in everyday clinical practice, but this article focuses on pyomyositis and the underlying pathophysiology of infections in the diabetic host.

Epidemiology

Pyomyositis is an acute bacterial infection of skeletal muscle characterized clinically by localized muscle pain, swelling and tenderness of large muscle groups. It is relatively rare in the United States.

The first cases in the United States were reported in 1971, and by 1991, only 68 cases were described (1). Although it is more commonly seen in the tropics (hence the other common name "tropical myositis"), the incidence is rising in North America coincident with increased numbers of immunocompromised patients. As we see more patients with a "sick leg" in clinic, pyomyositis should enter our differential.

Pathogenesis

The two key factors in the pathogenesis of pyomyositis seem to be damaged muscle and a source of pyogenic bacteria (2). Skeletal muscle is generally resistant to bacterial infection; Miyaka found that intraveneous injection of Staphylococcus aureus into dogs did not produce pyomyositis unless the muscles were traumatized by pinching, electric shock, or ischemia (3). In the clinical setting, muscle is damaged as a result of penetrating wounds, prolonged vascular insufficiency, sickle cell disease, or primary muscle infection with leptospirosis, viruses or parasites (4).

Tropical myositis was first described and is frequently seen in young boys and men who suffer frequent penetrating wounds of their feet and legs. Contiguous infection and bacteremic spread of infection can also play a role in the development of pyomyositis and were probably important in the case described.

Pathology

Upon microscopic examination of the affected muscle, different degrees of destruction are seen. Early on, only edematous separation of fibrils and fibers is seen. If the process continues, the muscle fiber is surrounded by lymphocytes and plasma cells (Figure 2). Subsequently, fibers degenerate with suppuration and many bacteria and PMN's are seen in the muscle space (5).

The larger skeletal muscles such as thighs, calves, gluteal, paraspinal, psoas, pectoralis, and deltoids are most often affected. A single muscle group is usually involved, but multiple groups are infected in 40 percent of the reported cases, and most often in patients with bacteremia (6). Staphylococcus aureus is the most frequently reported etiologic agent (95 percent of cases), followed by Group A streptococci (one percent - five percent), and case reports of Streptococcus pneumoniae, Hemophilus influenza, Escherichia coli, Neisseria gonorrhoea, Yersinia enterocolitica, Klebsiella species and Pseudomonas species (1,6).

Clinical presentation

The clinical presentation of pyomyositis is subacute. Patients report pain, swelling and mild tenderness over one muscle group. Induration develops and tenderness increases over several days until the muscle group has a "woody" tumor-like quality, which can lead to a misdiagnosis of sarcoma in some cases (4). Fever follows days later, with localizing symptoms and the muscles may become fluctuant.

The overall clinical picture is one of malaise as would be seen in any patient with an abscess. If not recognized and treated, pyomyositis may progress to sepsis and its complications, especially metastatic infection (5). Intramuscular pressure may lead to further muscle necrosis and the patients must be monitored closely for a compartment syndrome. Local erythema may be minimal until the process extends through subcutaneous tissues. Regional lymphadenitis is not prominent, but

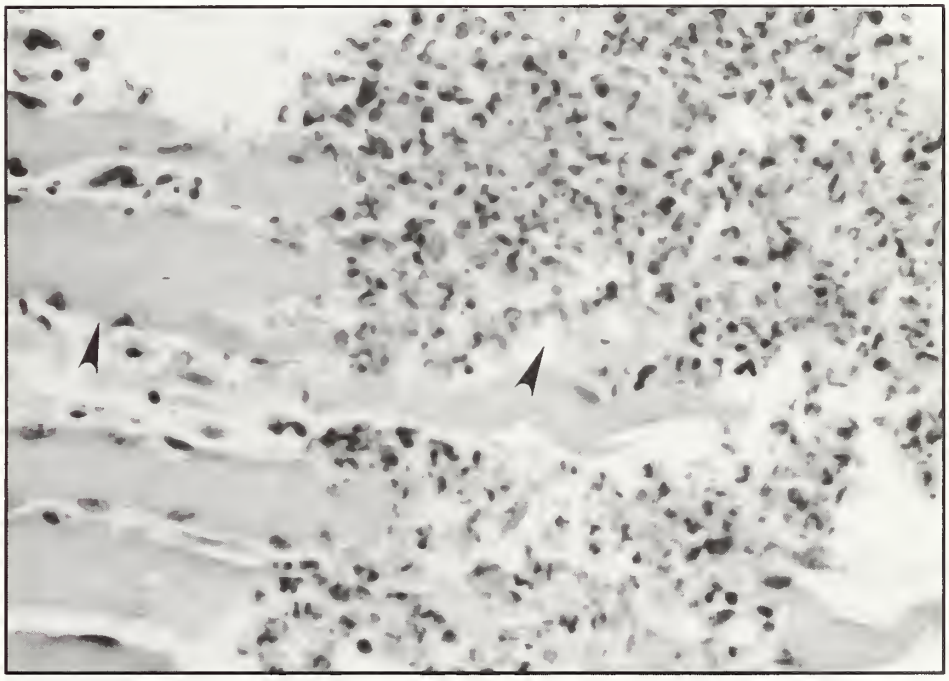

Figure 2. Microscopic section of muscle tissue in a patient with pyomyositis. The muscle fiber (left arrow) is surrounded by lymphocytes and plasma cells. Subsequently, fibers degenerate with suppuration and many bacteria and PMN's are seen (right arrow). ***(By permission H. Doshi, WVU)***

lymphatic spread is possible. A series of patients in Hawaii had pyoderma distal to the infected muscle (4).

Serum muscle enzymes are rarely elevated; therefore, normal CPK levels do not exclude the diagnosis of pyomyositis. Mild leukocytosis and anemia with an elevated erythocyte sedimentation rate are the rule. Blood cultures are frequently negative. Brown and Wheeler reported only 5/17 positive blood cultures in their series of patients with pyomyositis (4), but by the nature of the illness, bacteremia must play an important role in the pathogenesis of these muscle infections. Also, it seems that infected muscle might lead to a bacteremia.

The differential diagnosis of pyomyositis should include cellulitis/fascitis, deep venous thrombosis, a muscle tear or hematoma, lymphangitis, Baker's cyst, rhabdomyosarcoma (due to the "woody" induration described above) and underlying osteomyelitis. In the early stages when the symptoms are less localized, the differential would also include congestive heart failure, liver failure, renal failure, lymphatic obstruction, or myxedema.

Skeletal muscle is thought to be quite resistant to infection, but not in the immunocompromised host. There are now several cases of pyomyositis reported in patients with leukemia, agammaglobulinemia, scleroderma, Felty's syndrome, aplastic anemia, diabetes mellitus or HIV infection (1,7,8). Ten cases of pyomositis in patients with acquired immunodeficiency syndrome were reported by 1990 and Staphylococcus aureus was the predominant etiologic agent. Bacterial infections in patients with HIV infection are not uncommon. Staphylococcus aureus is the most common community acquired pathogen and many of these patients are IV drug users or have IV catheters; therefore, S. aureus pyomyositis is not a surprising finding in this subset of patients. In addition, impaired PMN chemotaxis and bactericidal capacity in AIDS patients is well described. Neutropenia due to infiltration of the bone marrow with granulomatous diseases such as mycobacteria, and the common use of myelotoxic drugs like azidothymidine (Zidovudine®), may also play a role (1).

Diagnosis

Awareness of the possibility of pyomyositis is the most important diagnostic tool. Early diagnosis of pyomyositis is difficult because the affected muscle is often deep and classic inflammatory signs are absent in surrounding tissue. The classic example of this clinical phenomenon is the psoas abscess.

CT scan or magnetic resonance imaging along with needle aspiration are now the studies of choice to confirm the diagnosis of pyomyositis. Ultrasound studies may be useful for the guided aspirate and may also be useful to serially follow the patient. Gallium and technetium scanning have also been used for diagnosis (9). In our case, the patient had received several days of IV antibiotics and the aspirated fluid was sterile, and the gram stain was negative (7).

Management

The management of pyomyositis is fairly straightforward. In early stages, treatment with antibiotics will abort serious muscle damage and will result in resolution in two weeks to three weeks. The clinician must consider the etiologic organisms described above and chose appropriate antibiotic coverage which is usually anti-staphylococcal. In the appropriate setting, methicillin (Staphcillin®) resistant staphylococcal organisms should be considered. In our case, the patient had previously had Staphylococcus epidermis mediastinitis after coronary artery bypass graft surgery; therefore, methicillin resistant staphylococcal organisms were a possibility and the patient received appropriate coverage.

Infection in the diabetic host

J.G. Larkin said, "Whether it be the plague or influenza, one thing we learn at the knee of our 'alma mater' is that diabetics are more likely to get it" (10). Diabetics truly are more prone to infection and infections are more serious in diabetic individuals.

Joslin observed that death secondary to infection in diabetics was 17.6 percent in the pre-insulin era. In the first two decades after insulin, deaths from infection in diabetics remained high at 12 percent. After a wide array of antimicrobials became available, the death rate from infection decreased to 1.5 percent (11). Hyperglycemia itself impairs certain key steps in humoral host defenses and it also can promote the virulence of some microbes. Atherosclerosis is prominent in diabetic patients and plays a major role in predisposition to infection. Arterial insufficiency reduces blood flow and therefore retards the arrival of PMN's and development of the local inflammatory response. Decreased delivery of oxygen to the site may enhance growth of a spectrum of organisms and oxygen dependent bacterial function of PMN's is also reduced (11,12).

Hyperglycemia and the metabolic derangements associated with diabetes mellitus are thought to independently impair certain functions of PMN's. The seven steps in PMN function are chemotaxis, increased cell (PMN) motility, osponization, adherence of the PMN to the organism, ingestion, degranulation, and the respiratory burst. Hyperglycemia is thought to interfere with at least five of these steps. Opsonization is reduced in the presence of elevated glucose concentrations because glucose binds to the biochemically active site of C_3 and inhibits the binding of this protein to the microbial surface (11,13). Adherence of PMN's to microbial organisms is decreased when they are incubated with high concentrations of glucose which suggests that glycolsylation of membrane-associated proteins might interfere with transmembrane signaling (11,14).

Rayfield and colleagues have described impairment of phagocytosis and the intracellular killing of internalized bacteria in patients with diabetes mellitus (11,15). During the respiratory burst step, superoxide radicals are formed which enhance bacterial killing. This production has been shown to be abnormally increased or uncontrolled in diabetic subjects leading to either poor bacterial killing or tissue damage at the site of inflammation (11,16).

Other metabolic derangements associated with poorly controlled diabetes mellitus play a role in PMN function. For example, in the absence of insulin, the activity of the two glycolytic enzymes, phosphofructokinase and pyruvate kinase are both reduced, thereby limiting the capacity of the PMN's to store and metabolize glucose. Hexokinase, which sets the rate at

which free glucose enters the glycolytic pathway, is also inhibited. These defects in energy production are known to disturb chemotaxis and phagocytosis (11).

Mild impairment of PMN function in individuals with poorly controlled diabetes is usually not critical as long as there are enough PMN's at the site of inflammation. But when there is damage to a muscle or to the arterial supply along with impairment of PMN function, the two key factors are present for development of pyomyositis. The other infectious emergencies of diabetes mellitus are well described by Bagdade and Segreti (11) as skin and soft issue infections, necrotizing cellulitis/fascitis, synergistic necrotizing cellulitis, gas gangrene, malignant external otitis, rhinocerebral mucormycosis, urinary tract infections and gallbladder infections. The increased frequency and severity of these infections in the diabetic host are decreased in the well-controlled patient. Control of hyperglycemia and metabolic derangements may be necessary to control these infections.

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Manuscripts to be presented for publication in *The West Virginia Medical Journal* should be prepared in accordance with "Uniform Requirements for Manuscripts Submitted to Biomedical Journals" (1) (International Committee of Medical Journal Editors).

The *West Virginia Medical Journal* will not consider for publication a paper or work that already has been reported in a published paper, or is described in a paper submitted or accepted for publication elsewhere.

Manuscripts, accompanied by one copy, should be typewritten, double-spaced, on one side only of white bond paper (8½ by 11 in.), with margins of at least one inch.

Use double spacing throughout, including (in the following order) title page, abstract, text, acknowledgements, references, tables, and legends for illustrations. Begin each of the following sections on separate pages: title page, abstract, text, acknowledgments, references, individual tables, and legends for illustrations. Number pages consecutively, beginning with the title page. Type the page number in the upper right-hand corner of each page.

All persons designated as authors should qualify for authorship. Each author should have participated sufficiently in the work to take public responsibility for the concept.

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Where reference is made to generically-designated drugs, the first such reference must be followed by parentheses containing the most commonly known trade-name drug of that designation. In addition, a listing of all generic drugs mentioned in the article, with their trade-name equivalents, should appear at the end of the article.

Tables (tabular listings) and figures (photos, drawings and charts) should be numbered and the point of reference in the text indicated in parentheses, i.e., (Table 1), (Figure 1).

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Number references consecutively in the order in which they are first mentioned in the text. Identify references in text, tables, and legends by arabic numerals (in parentheses).

No more than 25 references will be published free of charge to the author.

Use the style of references seen in this *Journal,* which is based on the formats used by the U. S. National Library of Medicine in *Index Medicus.* The titles of journals should be abbreviated according to the style used in *Index Medicus.* Consult "List of the Journals Indexed," printed annually in the January issue of *Index Medicus.*

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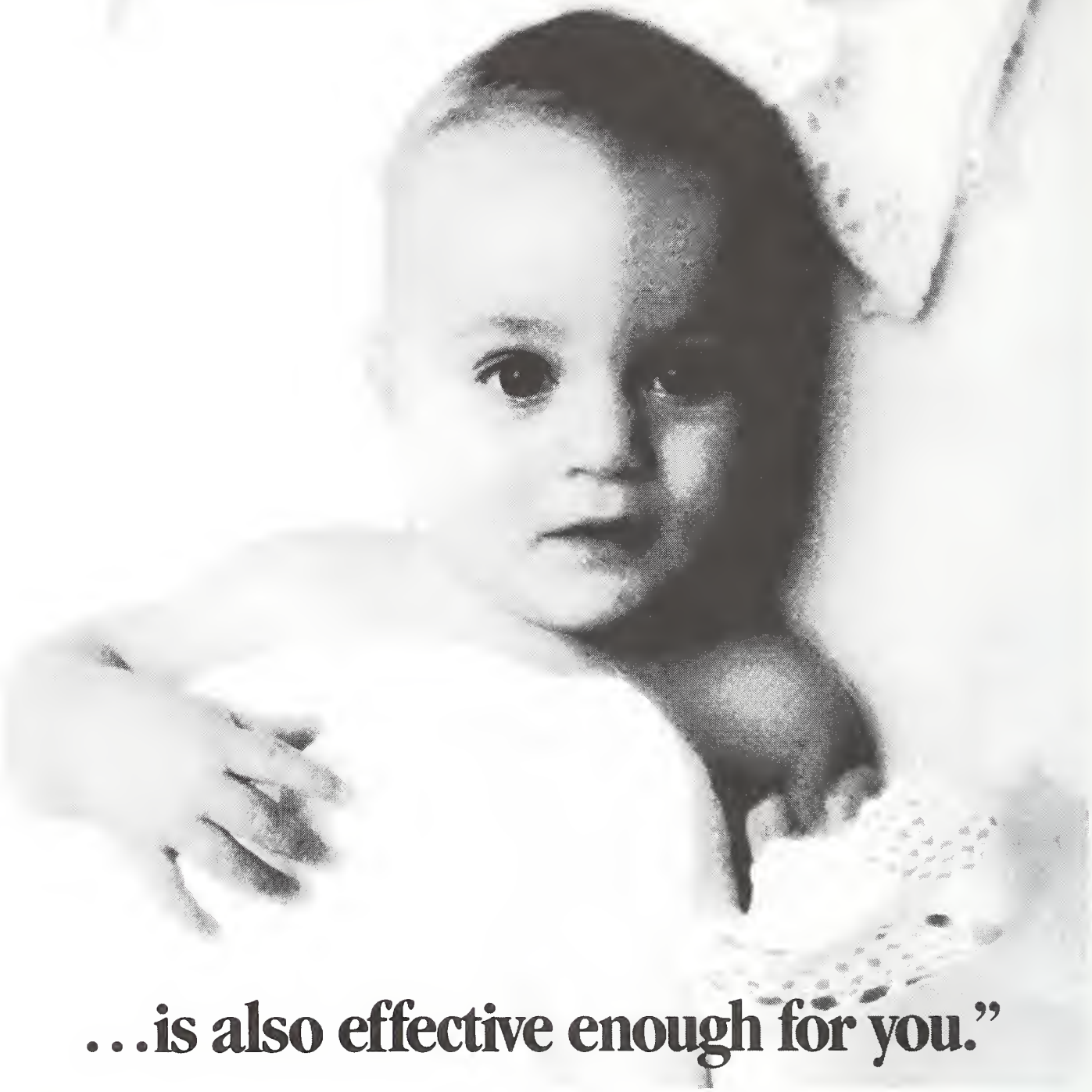

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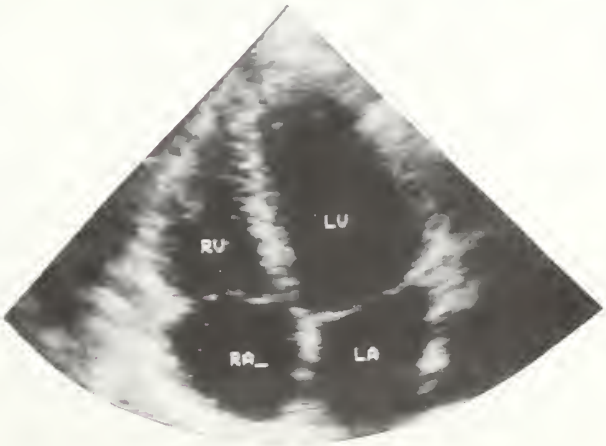

SOUND

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Abdominal
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President's Page

Constantino Y. Amores M.D.

Survival of a grand profession

This month I would like to share with you excerpts from the speech I presented recently at the June meeting of the Kanawha Medical Society.

Along the way through the many county societies meetings, other state medical associations gatherings, and the many national events we go to...medical or otherwise...among friends or foes alike...you cannot help but develop some insight; philosophy if you will, even a tempered tolerance and understanding of the status of American medicine today.

Let me share my thoughts with you.

Our health care has been built on the premise that all medical services should be available at the time of need. Almost always the physicians are told "Do everything, Doc."

This national philosophy began with the passage of the Hill-Burton Act by Congress shortly after World War II. This act encouraged the construction of hospitals in rural America to ensure access of health care to that part of our society. It continued as health care became an important part of union negotiations in the 50s.

In the 60s, Medicare and Medicaid were created to ensure that the elderly and impoverished received appropriate health services. Today, our citizens expect that their health needs, perceived or real, are met in a timely manner.

The irony is that the very government who initiated this momentum of increasing health care demands is absconding with their obligation to fund it.

Who's left holding the bag? We are. As physician we treat them all. Worst of all, for some reason or another, we are the scapegoat of the failure of the system.

Our politicians simply must stop promising health care as a birthright. There are 300,000 uninsured West Virginians, a large Medicare and Medicaid segment, and a much larger PEIA population. Together, these patients make up 56 percent of our total population. In 1989 alone, physicians and hospitals wrote off $17 million at the request of the PEIA. Now, they are down to paying you only 70 percent of your 1987 fee schedule.

And you know what? Although, physicians are the most affected by this fee, we only represent 23 percent of PEIA's annual budget.

If it makes you feel any better, West Virginia has the highest percentage rate in the country of physicians who take Medicare reimbursements as payment in full. Furthermore, a survey by our own West Virginia Health and Human Services Commission shows Medicaid patients feel they have the same access and quality of care as the rest of the insured population.

All West Virginians, including physicians, pay much more in liability insurance than residents of Kentucky and Virginia. Perhaps we should do what the New York Transit Authority has done, put a big sign in their buses and trains, which reads "Consumer litigation abuse. Who pays for it? YOU. 17 cents of your dollar fare goes for liability insurance."

Approximately $215 million a year is spent in West Virginia on defensive medicine alone. This does not include the $42 million a year spent on doctors' premiums or the $6.5 million by other health care providers. The late Senator Everette Dirksen of Illinois once said "a million dollars here and a million dollars there and a million dollars yonder. My, you are talking about real money now." A big chunk of the cost of health care, 25 percent - 30 percent is spent on defensive medicine.

Like you, all I was taught and trained for was to take care of the sick. I am overwhelmed by so many regulations, and such alphabet soup as CPT, DRG, RBRVS, HMO, PPRC, etc., etc., etc. I am confused. Such acronyms might as well be DDT or HIV. They are all enemies to me!!!

How do you keep up with them and our special journals, too?

I am frustrated by government and third parties second guessing the care of my patients -- bewildered at why patients sue me -- and mad at a tort system that has totally destroyed the privileged patient/doctor relationship.

If I sound desperate, you should be, too. But, I am not going to lay dead and let them roll over me.

Where do we go from here?

Health care is going to be a major issue in this coming election. It will make or break a politician, as they found out in Pennsylvania when Mr. Wilford beat Senator Thornburgh.

Ladies and Gentlemen -- This is our light at the end of the tunnel -- our chance to influence the future of health care in West Virginia and in this country. The only way we can do it is through a united front.

Why should we let them change what is undoubtedly the best medical care there is in the world today?

We must unite in a concerted effort or they will legislate us out of our Hippocratic Oath.

I know I am preaching to the choir here, but I am asking you to help me convince our colleagues, their families, employees and friends to join us in this crusade because what we are fighting for is the survival of a grand profession.

– Constantino Y. Amores, M.D.

Demise of the "Doctor's Doctor"

Previous editorials have alluded to the prospective demise of the primary care internist, the so called "Doctor's Doctor."

These specialists, with their broad understanding of the etiology, pathology, differential diagnosis and treatment of non-surgical diseases, have become a vanishing breed. Their triage efforts are not compensated and the intensive specialists they refer to are overcompensated. The largest specialty, with three to four years of postgraduate training, is now merely a launching pad to these subspecialty practices for most of today's medical residents. They seek greater personal, professional, intellectual and financial rewards, no longer found in primary care practices. The trend toward fewer qualified applicants for residencies and increasing dropout rates from primary care internal medicine continues.

Failed RBRVS, a cruel hoax, as well as limiting fees and electrocardiogram payments for fee-for-service physicians by Congress, further erodes the specialty. This adds to the previous problem of the cost of liability insurance, failure to pay and discounting by third parties and declining moral.

The rising costs of operating a "small business" with no prospect for increased fees makes internists, young and old, take a long look as to whether it is feasible to continue primary care practice.

Three young internists recently told me they plan to either take another residency, move out of town to a larger (subsidized) group or join an urgent care facility at "double the income for half the hours." There are no old internists (over 65) in this community. They are retired or have taken salaried positions.

We should lament the passing of this cornerstone mode of medical practice and the high standards of medical care established for it by the giants of the past.

"And therefore never send to know for whom the bell tolls; it tolls for thee." (John Donne, XVII)

John M. Hartman, M.D.

In My Opinion

The "right" to health care

One can scarcely get through a day this political season without hearing about the "right" of every United States citizen to receive "basic health care." While our government officials, our newscasters and commentators, and our political candidates debate such issues as what constitutes "basic" health care, who should pay for and control that care, and what percentage of the gross national product should be devoted to health care, virtually no one challenges the basic assertion that there is, indeed, a right to health care.

This essay examines the nature and sources of our rights as citizens of the United States and attempts to analyze the validity of the claim that each of us has the right to receive health care. It further discusses the wisdom of creating a right to receive health care as a matter of law.

The generally accepted source of our most basic rights as citizens is the Constitution of the United States. Consequently, those rights that are enumerated in the Constitution will be listed and an analysis of those rights will then be offered in an attempt to demonstrate a characteristic common to all or most of these rights.

Article I, Sections 1-8 establish the framework of the federal government, give the people the collective right to choose our president and congressmen, and enumerate the powers of the Congress. Section 9 then sets specific limits on the powers of the Congress and, in so doing, grants individuals the right to the writ of habeus corpus and protection from *ex post facto* laws and bills of attainder. Section 10 limits powers of state governments and specifically forbids the passing of any law impairing the obligations of contracts.

The First and Second Amendments guarantee to each citizen the freedom of religion, speech, press, assembly, and petition, and the right to keep and bear arms. The Third and Fourth Amendments acknowledge our right to resist the quartering of soldiers in our houses and our right to be secure in our persons, houses, papers, and effects against unreasonable search and seizure.

The Fifth, Sixth, and Seventh Amendments establish the rights to indictment by grand jury and speedy trial by jury, with the rights to be represented by counsel, to subpoena

witnesses and to confront our accusers. They also protect us from double jeopardy and mandatory self-incrimination, while guaranteeing the right to due process and the right to just compensation if our property is taken for public use. The Eight Amendment prohibits excessive bail or fines, or cruel and unusual punishment.

To those who would interpret too broadly the considerable powers given to the federal government, the founding fathers addressed the 10th Amendment, stating that, "The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people."

Beyond the Bill of Rights, the 13th Amendment forbids slavery and involuntary servitude except for convicted criminals. The 14th Amendment reinforces the right to due process of the law and guarantees equal protection of all citizens under state laws. The 15th, 19th, and 24th Amendments extend the right to vote without regard to race, national origin, sex, or non-payment of poll taxes.

These, I submit, are the truly basic or fundamental rights enjoyed by citizens of the United States. Those enumerated in the original Constitution and in the Bill of Rights were thought by the founding fathers to be inherent in the human condition, being derived from Devine Providence or from natural law, or some source more fundamental than government. It is particularly instructive to note that except in those matters having directly to do with government actions (such as trials, the taking of private property, etc.), the Constitution does not undertake to grant these rights. Rather, the Constitution, while creating a government and codifying the powers that the government cede to it, expressly forbid the government to take these rights away. Thus, the First Amendment says, "Congress shall make no law...abridging the freedom of speech, or of the press..." The Second Amendment says that the right to keep and bear arms "shall not be abridged." Section 9 of Article I states, "The privilege of the Writ of Habeus Corpus shall not be suspended, except..." And so it goes. The Ninth Amendment further makes the point by saying, "The enumeration in the Constitution, of certain rights, shall not be construed to deny or disparge others *retained* by the people.

Except for those rights that protect us from threatening actions by the government, the enumerated individual rights share one common thread: each can be enjoyed without the affirmative action of either the government or of any other citizens. They are, as Justice Brandeiss once put it, variations of the fundamental right to be left alone. It is only when government undertakes to confiscate our life, liberty, or property that we require rights to lawyers, courts, and juries. The full exercise of our other rights, such as the rights freely to worship, speak, publish, assemble, petition, and keep arms, and the right to be secure in our persons, houses, papers, and effects, requires only that others refrain from interfering.

To the list of rights guaranteed (not created!) by the United States Constitution can be added a second tier of rights, established by state constitutions and subordinate in their effects only to the federal Constitution and the laws and treaties made pursuant to it. For example, Article III of the Constitution of West Virginia contains a Bill of Rights that reinforces the transcendent nature of our basic rights. Section 1 of Article III states it succinctly: "All men are, by nature, equally free and independent, and have certain inherent rights, of which, when they enter into a state of society, they cannot, by any compact, deprive or divest their posterity, namely: the enjoyment of life and liberty, with the means of acquiring and possessing property, and of pursuing and obtaining happiness and safety."

A third tier of what might be called rights are the privileges or entitlements created by the Congress and the several state legislatures. These statutory rights, such as the rights to receive food stamps, Medicaid, housing assistance, and other doles, are expressions of a caring society's unwillingness to let even its most unproductive citizens fall below a certain standard of living. Unlike our basic rights, these rights cannot, in most instances, be exercised without the affirmative actions -- and sacrifices -- of others. They were born of the political process and exist at the pleasure of the people who elect the state and national legislators.

A final category of rights are the rights that arise from private contracts, such as those between employers and employees, or between insurance companies and their insureds. These rights are enforceable only against other voluntary parties to the contracts that created them.

From the foregoing analysis, it is clear that there does not now exist a universal right to receive health care. If such a right is to be created, it must be created by state or national statute, and the right will exist only to the extent and for such duration as the electorate dictate. It can never achieve the transcendent status that our basic rights, as guaranteed by our constitutions, enjoy. It is important in a free society that, as we rush to create a politically popular right, the cost and consequences of which can only be guessed, we not trample our basic rights, such as freedom from involuntary servitude, the right to enter into private contracts, the right to acquire and possess property, and the right to pursue health and safety.

My credentials as an interpreter of constitutions are at once laughable and absolute. I read both the West Virginia Constitution and the Constitution of the United States of America periodically, and have read books regarding the origin and interpretations of the federal document. As I read about the strained and creative (inventive?) interpretations of the Constitution, especially the 14th Amendment, and as I hear my U.S. Senator Jay Rockefeller refer to the 10th Amendment as "just a bunch of lawyer talk," I am struck by this simple fact: that if a highly motivated, reasonably intelligent, well educated citizen cannot read the Constitution and know reasonably well what rights we have as citizens, then we will have only those rights that the government finds it convenient, from time to time, to give us. As citizens, each of us has not only the credentials, but also the duty to future generations, to interpret the state and federal constitutions and to hold government officials accountable to them.

– Richard S. Kerr, M.D.

The Stage Is Set!

The West Virginia State Medical Association's 125th Annual Meeting

August 19 - 22, 1992
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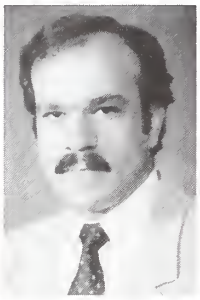
At Annual Meeting

First Session to discuss Health Care Planning Commission

Holloway


Comerci

Pulliam

Lewis

Amores

Sensabaugh

Stump

"The Practice of Medicine in West Virginia After the Health Care Planning Commission," will be the title of the First General Session at the WVSMA's Annual Meeting at The Greenbrier, August 19-22.

This session will highlight the activities of the six task forces within the HCPC and is scheduled to begin at 8:30 a.m. on Thursday, August 20, with a commentary by WVSMA Councilor-at-Large Derrick L. Latos, M.D., who is chairman of the Quality of Care and Practice Liability Task Force for the HCPC.

Following Dr. Latos' introduction, **WVSMA members Dr. John D. Holloway; Vice President Dr. James L. Comerci; President-Elect Dr. Robert P. Pulliam; Dr. Michael J. Lewis; President Dr. Constantino Y. Amores; and Council Chairman Dr. Michael M. Stump**, will share their perspectives on the specific task forces on which they serve. In addition, **Don Sensabaugh Jr., J.D.,** legal counsel for the WVSMA, will be participating in the discussion with Dr. Amores concerning the Quality of Care and Practice Liability Task Force.

Biographical information about these speakers begins below and for more details about any of the WVSMA Annual Meeting events, please contact Nancie Divvens at 925-0342.

Panelists Highlighted

Dr. Holloway received his medical degree from West Virginia University in 1979 and did three years of postgraduate training in internal medicine and peripheral vascular disease at the Cleveland Clinic Foundation.

Following his postgraduate studies in 1983, Dr. Holloway accepted his current position as a specialist in internal medicine and peripheral vascular medicine at the Wheeling Clinic in Wheeling, where he is serving as vice chairman of the executive committee. He is also president of the medical and dental staffs at Ohio Valley Medical Center and is a member of the medical staff at Wheeling Hospital.

A past president of the Ohio County Medical Society, Dr. Holloway is a member of the West Virginia Health Service System Task Force of the HCPC. He also holds memberships in the AMA, American Diabetes Association, American College of Physicians, the Society of Vascular Medicine and Biology, and the American Society of Internal Medicine.

A very active member of the Healthy West Virginia Coalition, Dr. Holloway is a runner who has completed marathons in Washington, D.C., Boston, New York City and Columbus, Ohio.

Dr. Comerci received his medical degree from WVU in 1980 and then completed a three-year residency in family medicine at Wheeling Hospital. Following his postgraduate studies, he went into private practice in Wheeling, where he is on the staffs of Wheeling Hospital and Ohio Valley Medical Center.

A member of the Basic Health Services Task Force of the HCPC, Dr. Comerci is a past president and member of the Ohio County Medical Society. He is a clinical assistant professor of family medicine at WVU and a board member and volunteer physician for Wheeling Health Right.

Dr. Comerci serves as a team physician for Bethany College and is also a program physician and therapist for TERRAP of West Virginia, a treatment program for agoraphobics. He is certified by the American Board of Family Practice and is a member of the West Virginia Chapter of the American Academy of Family Physicians and the AMA.

Dr. Pulliam is a native of Beckley who obtained both his master's degree in biochemistry and his medical degree from the Bowman Gray School of Medicine in Winston-Salem, N.C. He completed his internship at University Hospital in Seattle and did residencies at The Sloan Hospital for Women and Columbia Presbyterian Medical Center in New York City.

A lieutenant commander in the U.S.N.R., Dr. Pulliam served in Newport, R.I., from 1966-68. Following his military service, Dr. Pulliam returned to Beckley to open his OB/GYN practice and joined the staffs of Raleigh General Hospital, Beckley Hospital and Beckley Appalachian Regional Hospital.

A clinical professor of obstetrics and gynecology at Marshall University since 1984, Dr. Pulliam is currently

enrolled in the MBA program at the College of Graduate Studies in Charleston. He is the co-founder of DOCS, Inc., a computer company for medical offices, and is also the founder and major medical officer in Professional Medical Ultrasonics, Inc., a full-service private ultrasound laboratory.

A WVSMA member since 1968, Dr. Pulliam will be inaugurated as president at the WVSMA Annual Meeting in August. Active in many other professional organizations, Dr. Pulliam is a past president of the Raleigh County Medical Society and a fellow of the American College of Obstetricians/Gynecologists. He is chairman of Governor Caperton's Physician Provider Medicaid Enhancement Board and is a member of the Health Care Financing and Cost Control Task Force of the HCPC, the AMA, the West Virginia Obstetrical/ Gynecological Society, the American Fertility Society and the American Association of Gynecologic Laparoscopists.

Dr. Lewis obtained a bachelor's degree in chemical engineering from the West Virginia Institute of Technology in 1965, and then received master's and Ph.D. degrees in chemical engineering from Virginia Polytechnic Institute and State University. He worked for three years for the Union Carbide Corporation in Charleston as a research and development engineer before enrolling in medical school at WVU. Dr. Lewis received his medical degree in 1974, and did a residency in family practice at WVU Hospital.

From 1975-85, Dr. Lewis was in private practice in St. Mary's, W.Va., and then joined the medical staff at St. Joseph's Hospital in Parkersburg. While working at St. Joseph's, he was appointed a clinical assistant professor at WVU in Morgantown, and in 1985 he left the hospital when he became an associate professor at WVU. In 1990, Dr. Lewis was promoted to professor, and on July 1 he will assume his new role at the Charleston Division of WVU as associate vice president for Health Sciences.

Currently serving as president of the West Virginia Chapter of the American Academy of Family Physicians, Dr. Lewis is a fellow of the American Academy of Family Physicians and a diplomate of the American Board of Family Practice. Dr. Lewis is also a reviewer for the *American Family Physician Journal* and is a member of the Committee on Research for the American Academy of Family Physicians.

In addition to his role as a member of the Health Professions Task Force of the HCPC, Dr. Lewis is also a member of the Uncompensated Care Committee for the WVSMA.

Dr. Amores is a native of the Philippines, who received his doctor of medicine degree in 1961 from the University of Santo Tomas in Manila. After graduation, he completed a one-year rotation in a public charity hospital and then began practicing general family medicine in his hometown on Mactan Island.

Dr. Amores came to the United States in 1963 for an internship at Memorial Hospital in Phoenix. The following year he stayed in Phoenix to do a pathology residency at St. Joseph's Hospital, and then in 1965 he moved to New York for a two-year surgery residency at Nassau Hospital in Mineola. To complete his postgraduate studies, Dr. Amores relocated to Pittsburgh, where he studied neurosurgery at Mercy Hospital and Children's Hospital and also taught basic neural sciences at the University of Pittsburgh.

In 1971, Dr. Amores and his family settled in Charleston and he opened his neurosurgery practice. After 14 years in the Charleston medical community, he was elected chief of staff at the Charleston Area Medical Center and was also elected to the Executive Council of Kanawha Medical Society. The following year he became president of Kanawha Medical Society, and was voted in as a member of the WVSMA Council. He was elected vice president of the WVSMA in 1989; became president-elect in 1990; and in August 1991, assumed his current role as president.

A member of the Quality of Care and Practice Liability Task Force for the HCPC, Dr. Amores is also a member of the American Board of Neurological Surgeons, the Congress of Neurological Surgeons of America, the Australian-Asian Neurological Society, the International College of Surgeons and the Society of Philippine Surgeons of America.

Don Sensabaugh is a native of Parkersburg who holds a doctor of jurisprudence degree from the WVU College of Law, where he received the Corpus Juris Secundum award for significant legal scholarship. He graduated in the top ten percent of his law class and was also associate editor of the *West Virginia Law Review*.

Sensabaugh has practiced law in Charleston for over 15 years and is a partner in the law firm of Flaherty, Sensabaugh & Bonasso, which he helped to form. He specializes in the defense of medical and hospital malpractice suits and health care law.

A charter member of the Defense Trial Counsel of West Virginia, Sensabaugh is a member of the Section of Litigation of the American Bar Association, the American, West Virginia and Kanawha County Bar Associations, as well as the West Virginia State Bar. He is also a member of the American Society of Law and Medicine and the National Health Lawyers Association. For the past two years, he has been chairman of the West Virginia State Bar's Committee on Law and Medicine and formerly served on the first West Virginia Mandatory Continuing Legal Education Commission.

Sensabaugh is a member of the Quality of Care and Practice Liability Task Force of the HCPC. His clients include West Virginia Hospital Insurance Company, CNA Insurance Companies, St. Joseph's Hospital of Parkerburg, Princeton Community Hospital, West Virginia University Hospitals, Inc. and the WVSMA.

Dr. Stump received his medical degree from the University of Arkansas in 1948 and interned for a year at Ohio Valley General Hospital. In 1949, he entered general practice in Philippi and then served with the U.S. Air Force from 1952-54, obtaining the rank of captain.

In 1954, Dr. Stump resumed his general practice in Philippi and Ceredo, and he continued his postgraduate studies in 1960 with a three-year residency in pathology at Baylor University Affiliated Hospitals in Houston. Following his residency, Dr. Stump relocated to Chattanooga, Tenn., to work at Baroness Erlanger Hospital as a junior associate pathologist for two years. He then moved to Minot, N.D., to accept a position as pathologist and director of laboratories, as well as director of the School of Medical Technology at Trinity Hospital. A year later, he took on additional duties as an affiliate professor of medical technology at Minot State College.

Dr. Stump returned to Texas in 1971 to work as a pathologist and director of laboratories at both Great Southwest General Hospital and Arlington Community Hospital. After five years, Dr. Stump came back to West Virginia to accept a post as pathologist and director of laboratories at Memorial General Hospital in Elkins, where he also served as director of the hospital's School of Medical Technology. In 1986, Dr. Stump assumed his current role as pathologist and director of laboratories at Davis Memorial Hospital.

Dr. Stump began serving on the WVSMA Council in 1985 and was elected vice president in 1988; became president-elect in 1989; was president from 1990-91; and began serving in his current capacity as Council chairman in August 1991. As the WVSMA's representative on the Governor's Task Force on AIDS from 1988-89, Dr. Stump played a key role in drafting the present state legislation on AIDS treatment and testing.

A member of the Certificate of Need Task Force of the HCPC, Dr. Stump is also a life fellow of the College of American Pathologists and the American Society of Clinical Pathologists. In addition, Dr. Stump is a fellow of the American College of Utilization Review Physicians, and holds memberships in the West Virginia Association of Pathologists, the American College of Physician Executives, the American College of Nuclear Medicine, the Tygart's Valley Medical Society, the AMA, and the Southern Medical Association.

Urological Society Meets

The West Virginia Urological Society held its annual meeting, March 27-29, at Oglebay Park in Wheeling. Guest speakers included Dr. John Belis (far left), of Hershey Medical Center; Dr. Bill Tarry (third from left), WVU associate professor of pediatric urology; Dr. Unyime Nseyo (fourth from right), WVU associate professor; Dr. Don Lamm (third from right), WVU professor and chairman of urology; Dr. Bob Badalament (second from right), of Ohio State University; and Dr. Steve Streem (far right), of the Cleveland Clinic. Pictured with these guest speakers are two of the society's officers, Dr. David Lindert (second from left), past president; and Dr. Doug McKinney (fourth from left), secretary-treasurer.

WVU residents win ACS essay awards

Three WVU surgery residents received resident essay awards at the West Virginia Chapter of the American College of Surgeons' meeting held April 30-May 2 at The Greenbrier.

First place went to Dr. David Genecov for his essay, "Squamous Cell Carcinoma of the Hand: A 15-Year Experience." Second place was presented to Dr. Sherry Melton, "Effect of General Surgeons Teaching Endoscopy in a Surgical Residency Program;" and third place was awarded to Dr. Mark Nelson for "The Emergency of Splenic Abscess in the Multiple System Organ Failure Patient."

Dr. Carl Johnson honored in Morgantown

Johnson

Former WVSMA Council member Dr. Carl Johnson, 92, a retired Morgantown physician, was given a special tribute by the board of directors of the Foundation of Monongalia General Hospital and Morgantown Orthopedic Associates, Inc., on May 10.

Dr. Johnson was recognized for providing more than 50 years of quality health care service to the residents of the Morgantown area. He began his practice at the beginning of the Great Depression in 1928 and patients sometimes paid him for his services with chickens, hams, produce or other forms of barter.

In the early part of his career Dr. Johnson delivered babies, and throughout the years he was best known as a family practice physician specializing in pediatrics. Dr. Johnson was one of the last Morgantown physicians to continue making house calls after most of his colleagues abandoned the practice. He felt house calls were valuable tools in treating patients.

"I'd have the opportunity to see from the patients' homes if they were happy, getting along all right or possibly having a hard time economically, all of which are factors which could affect recovery," Dr. Johnson said.

Dr. Johnson taught at the WVU School of Medicine as a clinical associate professor and served as chief of staff at Monongalia General during his career. He became a fellow of the American College of Physicians in 1945.

After his retirement in 1974, Dr. Johnson continued his service to the Morgantown community and to Monongalia General Hospital as a member of hospital's foundation. He and his wife, Lillian, currently reside at the Southminister Retirement Home in Charlotte, N.C.

Princeton Community Hospital acquires Candela lasers

Princeton Community Hospital has become the 17th treatment center in the United States to acquire both the Candela Vascular and Pigmented Lesion Lasers.

These flashlamp-excited dye lasers are the world's first lasers specifically developed to treat benign vascular lesions like Port Wine Stains and benign pigmented lesions such as cafe au lait birthmarks and "age" or "liver" spots. These laser systems are a major advance over traditional methods of treatment because of their precise selectivity and ability to treat patients of all ages, including infants and very young children, without damage to normal surrounding tissue and with minimum need for anesthesia.

"The Candela Vascular and Pigmented Lesion Lasers represent a significant addition to our laser surgery service," explained Dr. Lee Smith, facial plastic and reconstructive surgeon. "Traditional treatments for these types of skin lesions, including other lasers, often caused effects such as scarring, permanent loss of skin color, and skin texture changes. With the Candela lasers, patients will have the advantage of minimal risk of side effects," Dr. Smith added.

The Candela Lasers allow physicians to treat birthmarks and lesions with a resulting 50-100 percent clearing after one to twelve treatments, depending on the type of disfigurement.

Three counties plan annual meeting

The Monongalia, Harrison and Marion County Medical Societies will hold their Annual Tri-County Medical Society Meeting on June 23 at the Fairmont Field Club.

This year's meeting topic is "Health Care Financing" and three viewpoints will be presented. The speakers include Dr. Lauve of the L.S.U. School of Medicine who is a proponent of the AMA's health care financing plan; Dr. Ringle, a Robert Wood Johnson fellow associated with the University of Colorado who favors Senator Jay Rockefeller's "Pay or Play Plan; and Dr. Carolyn Clancey, formally of the Medical College of Virginia, who represents The Physicians for a National Health Program. Moderator for the discussion will be Morgantown attorney Dan Ringer.

This meeting will begin with a social at 6:30 p.m., followed by dinner at 7 p.m., with speakers' presentations immediately following. All interested physicians and their spouses are welcome.

For more information, contact Dr. John Leon at 366-2600.

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Continuing Medical Education

Listed on this page are some of the upcoming CME programs which will be held in the state.

The programs this month were compiled by: Robin Rector, coordinator for CME for Charleston Area Medical Center; Kari Long, program director of CME and rural services for WVU; and Thelma Wilson, education coordinator for the Raleigh County Medical Society.

Futher details about these CME activities may be obtained by calling Rector at 348-9580; Long at 293-3937; and Wilson at 255-6341.

If you would like to have the CME programs offered by your institution or association for physicians published in the *Journal*, please contact Nancy Hill, managing editor, at 925-0342.

CAMC/WVU Health Sciences Center - Charleston

June 22 - "Nursing Care of the Patient with Head Trauma," 12:30 p.m. - 1:30 p.m., CAMC General Division, Room 420

Raleigh County Medical Society Beckley

June 23 - "Upper and Lower Respiratory Infections: Appropriate Therapy", Robert Gallaher, M.D., Black Knight Country Club, 6:30 p.m..

June 30 - "Nasal Rhinitis with Sinusitis," Paul A. Blair, M.D., Black Knight Country Club, 6:30 p.m.

Outreach Programs

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★ *WVU Health Sciences Center, Morgantown*

☐ *CAMC/WVU Health Sciences Center, Charleston*

Fairmont ★ Fairmont General Hospital, July 7, "Management of Lithium Toxicity," Van Nickell, M.D.

Point Pleasant ☐ pleasant Valley Hospital, June 25, noon, "Breast Cancer," Roberto Kusminsky, M.D.

White Sulphur Springs ★ The Greenbrier Clinic, June 22, "Implementing the New OSHA Laboratory Standard," Steven Faynor, M.D.

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PHYSICIAN'S RECOGNITION AWARDS

We wish to congratulate the following WVSMA members who recently received Physician's Recognition Awards from the AMA for voluntarily completing 150 credit hours of continuing medical education during the past three years:

Boone
Sriramloo Kesari, M.D.
Jerry A. Maliska, M.D.

Cabell
Charles Abraham, M.D.
David R. Ayers, M.D.
Earl James Foster, M.D.
Ali A. Garmestani, M.D.
Robert W. Lowe, M.D.

Eastern Panhandle
Konrad C. Nau, M.D.

Fayette
Fred L. Akerberg, M.D.

Greenbrier Valley
David F. Meriwether, M.D.

Harrison
Gaspar Z. Barcinas, M.D.
George T. Fredrick, M.D.
Louis F. Ortenzio, Jr., M.D.

Kanawha
Carmelita N. Bautista, M.D.
Cecilio V. Delgra, M.D.
Walter E. Duling, M.D.
Alfred John Magee, M.D.
Thompson Pearcy, Sr., M.D.
Purushottam L. Verma, M.D.

Marion
Charles E. Haislip, M.D.

Marshall
Thomas O. Dickey, Jr., M.D.

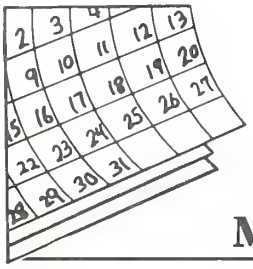
Mercer
Theodore P. Werblin, M.D.

Monongalia
Charles Andrew Heiskell, M.D.
Julio Hochberg, M.D.

Parkersburg Academy
Wolfgang W. Strobl, M.D.

Raleigh
John M. Daniel, M.D.
Anthony T. Dinh, M.D.
Anne C. Hooper, M.D.
Sang Kwun Kim, M.D.
Stephen T. J. Lee, M.D.

Tygart's Valley
Bala N. Chandran, M.D.
Joseph Anthony Tavolacci, M.D.



Medical Meetings

July

10-12—American College of Allergy and Immunology, Nashville
12-15—International Society for Adolescent Psychiatry, Chicago
12-17—Institute for Healthcare Quality Management, Healthcare Quality Educational Foundation (sponsor), Northwestern University, Evanston, Ill.
11-18—2nd Annual Meeting of the Southern Association for Geriatric Medicine, London and Lyon, France.
17-19—Caring for the Aging Population: Knowledge and Skills for the Primary Care Physician, San Francisco

August

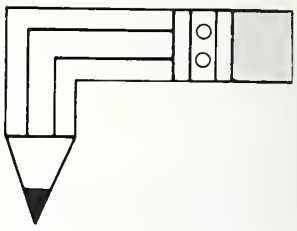
1-3—Financial Management Conference for Physicians and Dentists, Medical College of Georgia (sponsor), Hilton Head Island, S.C.
2-6—35th Pediatric Program, Aspen, Colo.
5-7—9th Annual Meeting of the Southern Orthopaedic Association, Whistler, British Columbia
5-9—American In Vitro Allergy/Immunology Society, Jackson Hole, Wyo.
13-15—5th Annual Meeting of the Southern Association for Oncology, Hilton Head Island, S.C.
15-21—6th Annual Comprehensive Review in Internal Medicine, Ohio State University, Columbus
19-22—WVSMA 125th Annual Meeting, White Sulphur Springs
28-29—Third Annual Hearing Impaired Conference, West Virginia Hospital Research and Education Foundation, Inc. (sponsor), Charleston

September

11—Successful Money Management for Mid-Career Physicians, AMA (sponsor), Baltimore
10-12—American Gynecological and Obstetrical Society, Hot Springs, Va.
12—Advanced Trauma Life Support™ Abbreviated Instructor Course, District of Columbia Committee on Trauma of the ACS and the Georgetown University Medical Center Office of CME (sponsors), Washington, D.C.
13-17—American Academy of Otolaryngology - Head and Neck Surgery, Washington, D.C.
13-18—MRI Education Foundation Seminar, Cincinnati.

For More Information . . .

Contact the Journal for additional information about most of the above meetings. Call (304) 925-0342.



Poetry Corner

Nostalgia

I walked one day where
Many years ago
A farmer plowed
His fields
Then planted crops and
Worked long days
To nurture them for
Very meager yields.
The farm is overgrown and
Fences fallen down;
No sign of
All the work he did
To bring in
Yearly crops of
Wheat, and oats, and corn;
Just bramble bushes,
Brush and trees;
The farmhouse tumble-down
And falling barn forlorn.
I wonder now
What were his dreams
And hopes
Long years ago
When first he worked
These fields and
Raised his family here?
And have they
Been fulfilled?
Or were they overcome,
As were his fields,
By tangled growth
Which shut out hope?
Did sorrow fill his life,
Or happiness abound?
Such thoughts can overwhelm
If one permits them to
But God
Provides the answer sure!
There is no loss,
All life is gain
If in His love we dwell
And to His will are pure.

E. Leon Linger, M.D.

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Bureau of Public Health News

This page of material is submitted and paid for by the Bureau of Public Health.

OEHS assisting with questions about medical waste rule

With the Infectious Medical Waste Rule now in effect, the staff of the Bureau's Office of Environmental Health Services (OEHS) is available for presentations to health care provider groups around the state. OEHS representatives are directing their 45-minute programs toward physicians, nurses and administrators of health care facilities.

OEHS Director Joseph Schock says a number of inquiries are coming into the office regarding the new legislative rule, which was emergency filed in April. According to Schock, many of the questions concern disposal of infectious medical waste directly into the solid waste stream without treatment. This is contrary to the rule, and the generator could be fined for this act. All infectious waste must be treated before being disposed of in the sanitary landfill.

A hotline has been established at 1-800-922-1255 to take questions about the rule or for technical assistance. Organizations may also call the hotline or the OEHS office at 558-2981 to request a presentation on the rule, or to obtain copies of "The Infectious Medical Waste Management Guide for Small Quantity Generators."

State PATCH site leads fight for clean air

The Bureau's Division of Health Promotion has assisted in the development of over 15 community-based health promotion sites in the state. One of the first Planned Approach to Community Health (PATCH) sites also remains one of the strongest.

The Monongalia County PATCH was part of a county-wide effort scoring a major health victory in Monongalia County and the city of Morgantown. PATCH staff and members of the Group Against Smoke Pollution (GASP) were responsible for coordinating efforts to get a city ordinance and a county Board of Health regulation prohibiting smoking in enclosed places, except in designated smoking areas.

Both the regulation and the ordinance are being viewed from an educational point instead of a law enforcement one. When enforcement is necessary, it will be taken against owners and managers of establishments, rather than the smoker.

For more information on PATCH sites or tobacco control issues, contact the Division of Health Promotion at 558-0644.

Diabetic eye disease screenings scheduled

Free screenings for diabetic eye disease will be offered at five rural primary care centers in southern West Virginia during the month of June.

The screenings will take place on June 1 and 24 at the New River Health Association in Scarbro; June 3 at the Monroe County Primary Care Center in Union; June 22 at the Mercer County Primary Care Center in Bluefield; June 25 at the Braxton County Memorial Hospital in Gassaway; and June 29 at the War Primary Care Center in War.

Conducted through the West Virginia Diabetic Eye Care Project, the screenings are a joint effort of the West Virginia Bureau of Public Health, the WVU School of Medicine and local health care providers. The project is funded by the Centers for Disease Control, and is directed by retina specialist Charles D. Mayron, M.D., of the WVU School of Medicine.

Diabetic retinopathy is the leading cause of new blindness among adults ages 20 to 64 in the United States, and it is a leading cause of blindness among all adults in the nation.

A significant portion of blindness and severe vision loss due to diabetes is preventable with early detection and timely treatment. Yet many people at risk don't receive regular eye examinations to detect problems before they impair vision. This project uses advanced technology to bring ophthalmological evaluation to diabetic individuals in rural areas who may not have access to or have not received the recommended annual dilated eye exam.

For more information, contact the Division of Health Promotion's Diabetes program at 558-0644.

Schools get help in promoting wellness for communities

To help schools reduce health risks for youth, the Comprehensive School Health initiative in West Virginia is organizing the communities in which schools operate to enhance and support the health, health-related skills and the health attitudes and practices of children and other citizens.

The Comprehensive School Health model coordinates eight individual components to have a complementary and synergistic effect on the health and well-being of students, parents, school staff and the community. These components include school environment, physical education, school food services, school counseling services, staff wellness programs and integrated school-community health promotion efforts.

Currently, the West Virginia School Health Committee has chosen Hardy, Webster, Clay and Ritchie counties to pilot the initiative.

For more information, or to become involved in the school health efforts in your community, call the Division of Health Promotion at 558-0644.

Planning A Change?

Hospital-guaranteed and private practice opportunities for board certified/eligible physicians are available in West Virginia and western Pennsylvania in the following specialties.

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WEST VIRGINIA UNIVERSITY HEALTH SCIENCES CENTER

Compiled from material furnished by the West Virginia University Health Sciences Center, Communications Division, Morgantown.

Three orthopedic surgeons join faculty

The Department of Orthopedic Surgery has recruited three new surgeons, Drs. William R. Post, R. David Bauer and Jaiyoung Ryu.

Dr. Post will be coming to WVU from the University of Connecticut, where he is currently serving a fellowship in sports-related orthopedic surgery. He received his medical degree from the Medical College of Pennsylvania and served a residency at WVU Hospitals.

Dr. Bauer is currently serving a fellowship in spinal surgery at the University of California in San Diego. He attended medical school at the College of Physicians and Surgeons at Columbia University and completed a residency at New York University Medical Center.

Dr. Ryu will be the new vice chairman for research and chief of the section of hand surgery. He received his medical degree from Catholic Medical College in Seoul, Korea, and served a residency at the University of Cincinnati, the Medical College of Pennsylvania, and Brookdale Hospital Medical Center in Brooklyn, N.Y. Dr. Ryu served fellowships at the University of Connecticut in Farmington and the Mayo Clinic, and is currently the director of orthopedic research and chief of hand surgery at Texas Tech in El Paso.

New director named for Occupational Safety and Health

Dr. Alan Ducatman has been named director of the WVU School of Medicine's Institute of Occupational Safety and Health.

Dr. Ducatman comes to WVU from the Massachusetts Institute of Technology, where he served as director of Environmental Medical Service, as well as acting as an environmental consultant. He received his medical degree from Wayne State University in Detroit, and served both a medical residency and fellowship at the Mayo Clinic in Rochester, Minn.

As director of the WVU Institute of Occupational Safety and Health, Dr. Ducatman succeeds Dr. Mario C. Battigelli, who is retiring.

Lynch named director of bone marrow transplant program

Dr. Joseph P. Lynch will be joining the Department of Medicine, section of hematology/oncology, on July 15 as director of the Adult Bone Marrow Transplant Program.

Dr. Lynch received his medical degree from Georgetown University Medical School and served a residency in internal medicine at WVU Hospitals. He served a fellowship in medical oncology at Allegheny General Hospital and is currently serving a fellowship in bone marrow transplantation at the University of Louisville.

Hochberg publishes chapter, presents visiting lectureship

Hochberg

Dr. Julio Hochberg, associate professor of surgery, has published a chapter in Rob and Smith's Operative Surgery Manual in the section on head and neck surgery.

Entitled "Reconstructive Techniques of the Skin," the extensively illustrated chapter explains the various techniques of skin reconstruction, suturing, and post-operative care. The manual is published internationally by Butterworth-Heinemann.

Dr. Hochberg was also a visiting professor April 10-11 at the State University of New York (SUNY) at Syracuse. He made presentations on "Tissue Expanders in Reconstructive Surgery" during SUNY's Department of Surgery Grand Rounds, and participated in teaching rounds with residents on the subject of reconstruction of chest and abdominal wall deformities.

Murray presents Preakness Visiting Professor Lectureship

Murray

On Saturday, May 16, Dr. Gordon Murray, professor and chair of surgery, presented the Preakness Visiting Professor Lectureship, held in conjunction with the Preakness Horse Race, at the University of Maryland.

Dr. Murray's lecture was entitled "Operative Management for Esophageal Motor Disorders." In addition, Dr. Murray discussed case presentations with University of Maryland thoracic surgical residents during his visit.

Physiology student receives award

Maley Dey, a physiology student, recently received one of three "Student Awards" from the American Physiological Society at their 1991 San Antonio Conference.

At the conference, Dey presented his paper, "Thyroidal Vascular Responsiveness to Parasympathetic Stimulation Is Increased in Hyperthyroidism." Dey's research concluded that blood flow in animals becomes more sensitive to the parasympathetic nerve in hyperthyroidism.

A native of Calcutta, India, Dey is completing his Ph.D. at WVU.

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Cost for members of the American Medical Association is $495 and $595 for nonmembers. You can receive a $100 early-bird discount by registering before August 1. Discounts are also available for groups of three or more registrants from the same medical staff.

For immediate registration or information, call 800 262-3211.

American Medical Association
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Marshall University School of Medicine

Compiled from material furnished by the Office of University Relations, Marshall University, Huntington.

PHS training grant to enhance rural health education efforts

Marshall University medical students will receive more intense exposure to rural family practice during their first two years with the help of a new $220,000 training grant from the U.S. Public Health Service.

"We've been actually teaching health care for rural communities in the classroom longer than anyone else that I know of, as well as taking students to rural communities," said Dr. Robert B. Walker, acting associate dean for clinical affairs and chairman of the Department of Family and Community Health. "This grant will allow us to intensify that rural exposure in the critical first two years of medical school by putting students out in the field longer and with more structured activities," he added.

In the new Marshall program, which begins this fall, students will receive concise classroom preparation and then be assigned in groups of four to work with an experienced rural practitioner. They will spend several afternoons at the practice, interviewing patients, observing the practice, and touring the community.

The students will be introduced to a rural family, whose members they will follow throughout the two-year course. They also will accompany a rural family physician on a home visit to an elderly patient and on hospital rounds. Each student will be assigned to a rural expectant mother, attending two prenatal visits and being allowed to attend the infant's delivery. These field experiences will be reinforced by ongoing discussion groups at Marshall in which students exchange and analyze their experiences.

The program will use Marshall's existing rural education network of private, federal and community-owned practices throughout southwestern West Virginia. The grant funding will be used for travel costs and to cover the cost of staff time needed to match 96 students up with the series of field experiences, small group discussions and classroom experiences.

"We believe this program will improve students' attitudes about rural health and certainly will enhance their knowledge in this area," Dr. Walker said. "As a result, we expect more of them to practice in rural areas."

Dr. Walker noted that 47 of West Virginia's 55 counties remain classified as medically underserved, and that state officials estimate an immediate need for 160 doctors in rural communities. West Virginia ranked next to last in access to medical care in the Northwestern National State Health Rankings in 1990. In addition, key indicators such as infant deaths rose in 1990 after steadily declining for years. Nationally, more than 4,000 physicians are needed to meet the needs of the 13 million people who live in shortage areas.

"Our nation's current form of medical education has been unable to meet these needs," Dr. Walker said. "Programs are needed which expose students, early in their professional education, to the challenges and rewards of rural practice and to successful role models in the rural environment. Marshall has been successful in attracting students to family practice — we ranked second in the country in 1990 in the percentage of students entering this specialty — but better ways are needed to interest students in careers in rural practice," he said.

Student awarded Washington Health Policy Fellowship

Paul Ambrose of Marshall University is one of 10 medical students nationwide selected to receive a Washington Health Policy Fellowship.

Through the program, Ambrose will work with the Association of State and Territorial Health Officials from June 15 to August 7. He will analyze the various health-care reform proposals being considered at the federal level, and will assess how each proposal would affect primary health care, particularly in rural areas.

The fellowship is offered by the American Medical Student Association Foundation, and nearly 100 students applied for this year's 10 available slots.

"The time for the physician as a political bystander is past," Ambrose said in his application. Citing the nationwide shortage of physicians in rural areas, he said government action is needed to address the problem — and that he wants to be part of the solution. "It is my intent to take an active role in the decisions which affect the health of our nation," he said.

Ambrose will follow the fellowship with a year of independent study at the University of Salamanca in Spain. He will be comparing Spain's health care system to that of the United States.

Aulick, Bledsoe receive promotions

Dr. L. Howard Aulick, professor of physiology, has been named assistant dean for research development for the Marshall University School of Medicine, and Karen L. Bledsoe has been appointed assistant dean for external affairs, Dean Dr. Charles H. McKown Jr. has announced.

"Dr. Aulick brings with him many years of service to Marshall and a thorough understanding of the research process," Dr. McKown said. "He will provide oversight for the research program, as well as help faculty members identify and apply for grants.

"Ms. Bledsoe will ensure that the medical school complies with requirements from accreditation agencies, the new Higher Education Report Card, and the new rural health initiatives. Her comprehensive knowledge of our programs and her outstanding organizational abilities are essential to us in meeting these highly detailed requirements," Dr. McKown said.

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AIR FORCE

Medical Student News

Editor's Note: *If you would like to contribute an article for this page, please contact Nancy Hill, managing editor, at 925-0342.*

130 Students Now Members of WVSMA

The revitalization of the West Virginia State Medical Association Medical Student Section (WVSMA-MSS) has resulted in a dramatic increase in membership. The 130 current members of WVSMA-MSS at the three campuses are as follows:

WVU - Morgantown

Frank Abraham
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Robert Blake
Robert Bowers II
Brad Brautigan
Kristine Burns
David Calfee
Jeffrey Carpenter
Myra Carpenter
Scott Caveney
Mark Choueiri
Ada Conway
Paul Cox
David Currence
Tina Cutone
Robert Davis
Darrell Donley
Daniel Dorsey
Angela Doss
Stephen Durrenberger
Michael Faust
Jeffrey Floyd
Alatheia Foster
Scott Friedman
Huey Fu
Kai Fu
Joseph Fuscaldo
Harmindar Gill
Parabhdeep Gill
Thomas Grove
David Hall
Kimberly Hamrick
Holly Hartman
Ella Harvey
Jeffrey Hung
Patricia Jones
James Kaufman
Curtis Kloc
Sarah Kotchen
Loreen Lamm Pettit
David Lawrence
Heath Lemley
Juddson Lindley
Gerardo Lopez
Stephen Lostetter Jr.
C. Malanga
Marnie Marker
Julia Martin
Jennifer Mawhinney
Michael Mullen
Kenneth Nanners
Jonathan Newman
Phillip Nichols
Patricia Nuse
Michell Nuss
Richard Oakes II
Kimberly Ott
Kathleen Owens
Elizabeth Powers
Frances Pucharich
Seyed Saadat
Cassandra Salgado
Daniel Snavely
Michael Stanchina
Mark Steele
Kim Stooke
Paveena Sukkasem
Richard Thomas
Michael Trotta
Eileen Turbessi
Sharileda Vance
Michael Wayt
Peter Wearden
Nora Wenig
David Wilson
Philip Yin
Khalique Zahir

WVU - Charleston

James Bailey Jr.
Judith Brown
John Dinsmore
George Faber
Emily Hamrick
Courtney Harpold
Joe Jarrell
Katherine Kauh
Jeffrey Lawson
Jill McClanahan
Daniel Stickler II
Sue Upton

Marshall University

Liza Arceo
Todd Bennett
Guy Buckingham
Timothy Cook
Dennis Cupit
Philip Ferkler
George Gleva
Amy Hamilton
Marta Hayne
Darin Jacoby
Jeffrey Kessel
Cheryl Kirk
Paul Little Jr.
Sanjay Madnani
Brian Magrane
Michael Maroney
Meredith Montsinger
John Neville Jr.
Deborah Parsons
Alicia Pauley
Benita Petri
Rhonda Ross
Kathy Saber
Jerry Scott
Dianna Shipley
Satbir Singh
Rodney Sirk
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We are pleased to welcome the following new members to the WVSMA:

John M. Adams, M.D.
611 7th Avenue
Huntington, WV 25727

Dale R. Barnes, M.D.
P.O. Box AA
Welch, WV 24801

Stewart Callis, M.D.
317 East Oak Street
Oakland, MD 21550

Thomas Crosby, M.D
300 Wedgewood Drive
Morgantown, WV 26506

Hassan H. Ramadan, M.D.
WVU School of Medicine
Department of Otolaryngology
Morgantown, WV 26506

Thomas Ream, M.D
1605 Warwood Avenue
Wheeling, WV 26003

G. Millard Simmons, M.D.
WVU School of Medicine
Department of OB/GYN
Morgantown, WV 26506

David Stastny, D.O.
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Obituaries

George Mathew Kellas, M.D.

George Mathew Kellas, M.D., of Wheeling, died Thursday, May 14 in Wheeling Hospital. He was 74.

A native of Wheeling, Dr. Kellas was a graduate of West Virginia University, who received his medical degree from the University of Pennsylvania in Philadelphia and was awarded membership in the George A. Piersol Anatomical Society. He completed his internship in 1942 at the Ohio Valley Medical Center in Wheeling, and continued his training in allergy and immunology at Montefiore Hospital in Pittsburgh.

Dr. Kellas was medical director and director of medical education at Wheeling Hospital from 1959-82. In addition, he helped create the Family Practice Residency Program at the hospital, which he served as director of from 1977-87, and as associate director of since 1987. During his career at the hospital, Dr. Kellas was also instrumental in the development of the Medical Park campus, the Renal Dialysis Center, and the Cardiac Catherization and Cancer-Oncology Departments.

In 1970, Dr. Kellas became certified as a diplomat of the American Board of Family Practice and was recertified in 1977 and 1983. He was an associate clinical professor at WVU and has served on many state and local committees, including the West Virginia Survey Team for Continuing Medical Education and the Committee on West Virginia Medical Education and Hospitals. He also served as president of the West Virginia Council of Teaching Hospitals and as president of Emergency Medical Services for Northern West Virginia.

An Army veteran of WWII, Dr. Kellas had been a WVSMA member since 1949 and was also a member of the Ohio County Medical Society, Fort Henry Academy, Wheeling Heart Association and the Wheeling TB Association.

In 1991 he was awarded a lifetime membership in the American Academy of Family Practice.

Surviving are his wife, Vangie Spanos Kellas; a son, George M. II of Wheeling; a sister, Sophie Mellis of Cleveland, Ohio; several nieces and nephews.

C. Dudley Miller, M.D.

C. Dudley Miller, M.D., 77, of Charlotte, N.C., died May 14.

Dr. Miller was a graduate of the University of South Dakota and received his medical degree in 1941 from Creighton University. In 1942, he started working with the U.S. Public Health Service and was commissioned a medical officer, serving in World War II as a ward surgeon and ship's surgeon. He retired in 1964 as medical director and then practiced urology until retiring again in 1978.

Dr. Miller served on the faculties of the University of Washington in Seattle, Columbia University and Vanderbilt Clinic of Presbyterian Hospital in New York City, the College of Physicians and Surgeons, and Marshall University.

Dr. Miller was a fellow of the American College of Surgeons and the New York Academy of Medicine. In addition to his membership in the WVSMA, Dr. Miller was also a member of the Cabell County Medical Society, the Urological Association, the AMA and the Association of Military Surgeons of the U.S.

Surviving are his wife, Helen Miller; one son, Dr. Charles Miller Jr. of Denver, N.C.; one daughter, Kathleen Erickson of Charlotte, N.C.; two sisters, Elizabeth Miller and Donna Jacob, both of Mount Vernon, Iowa; and four grandchildren.

Michael A. Santer Sr., M.D.

Michael A. Santer Sr., M.D., 84, of Vienna, died May 6 at his home after a long illness.

Dr. Santer had been in general practice for 54 years at St. Joseph's Hospital. He retired in 1991.

Born in Smock, Pa., Dr. Santer is a graduate of St. Vincent's College in Latrobe, Pa., and Georgetown University School of Medicine in Washington D.C. He did his internship at Uniontown Hospital in Uniontown, Pa., and his surgical residency at St. Joseph's Hospital in Parkersburg.

Dr. Santer was a lieutenant commander in the U.S. Navy Medical Corps during World War II. He had been a member of the WVSMA since 1938 and was also a member of the Parkersburg Council 594 Knights of Columbus, the Elks Lodge, the Parkersburg Academy of Medicine, the Southern Medical Association, the American Medical Association and St. Michael's Catholic Church in Vienna.

He is survived by his wife, Regina T. Santer; two daughters, Regina Ann Studzinski of Chester, Pa., and Mary Katherine Post of Pickerington, Ohio; six sons, Michael A. Santer Jr., M.D., Matthew P. Santer and Joseph T. Santer, all of Parkersburg, Thomas F. Santer of Vienna, Stephen F. Santer of Hurricane and Paul M. Santer of Charleston; a sister, Ann Hackett of Ogdensburg, N.Y.; 21 grandchildren and several nieces and nephews.

County Societies

Marion

Paul Gruber, M.D., assistant professor of medicine and director of interventional cardiology at the University of Maryland, was the guest speaker at the society's April meeting.

In May, a joint meeting of the society and the Marion County Bar Association was held which featured Don Nehlen, coach of the WVU football team, as speaker.

McDowell

The May dinner and scientific presentation by member Dr. Siva Prasad was sponsored by Sandoz Pharmaceuticals Corporation. Dr. Prasad's topic was "Diabetes and Hypertension."

Dr. Kao was granted retired status at the meeting and copies of a letter by Dr. J. Cook about hospice care were distributed. Dr. Herland reported on the number of members in the society and again mentioned the need for all members to also join the WVSMA and AMA.

In other new business, the society unanimously approved a request to grant money to a contest being sponsored for McDowell County students, grades 5 through 9. Dr. Herland was appointed delegate and Dr. Michaelis was appointed alternate for the WVSMA Annual Meeting in August.

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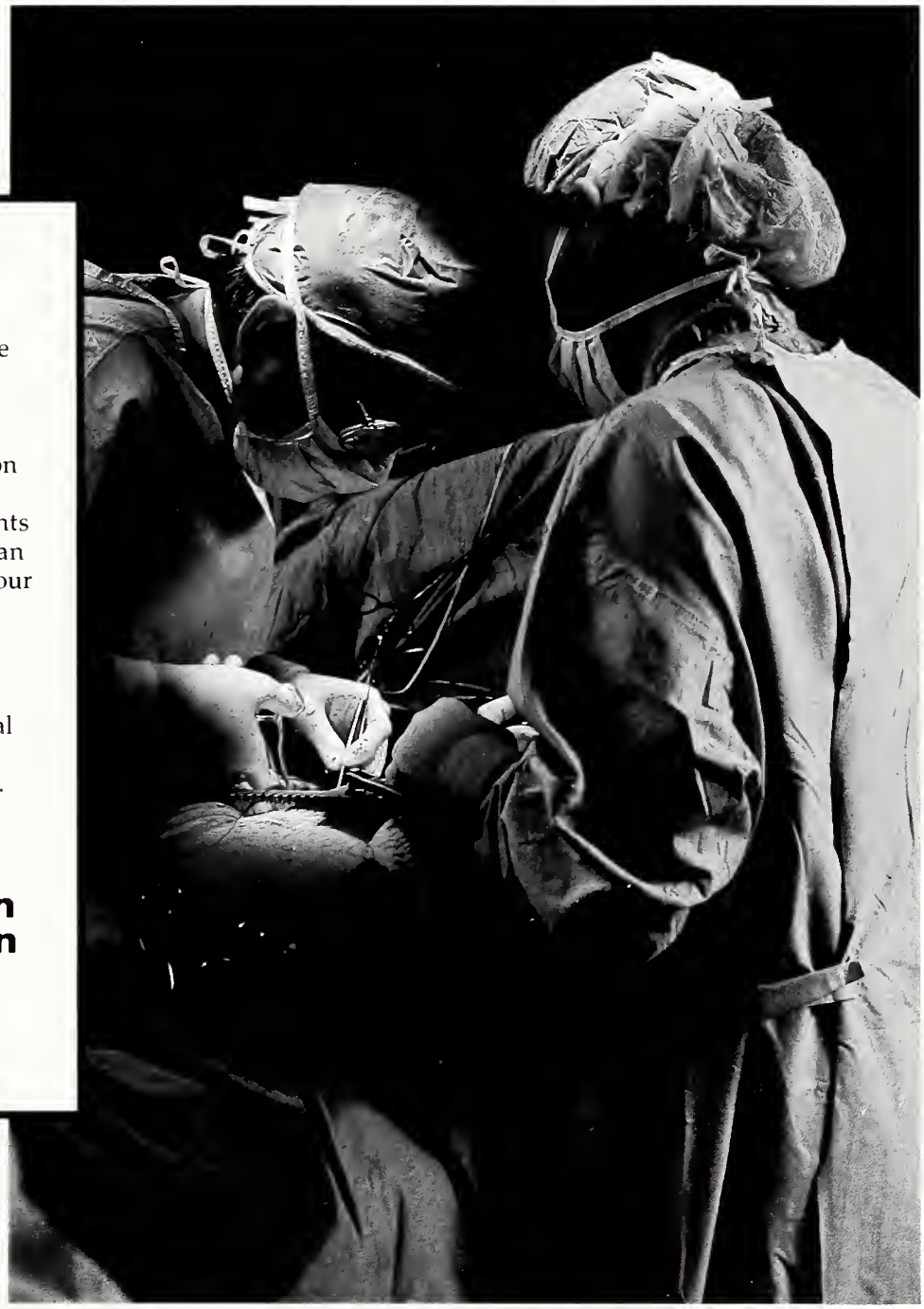

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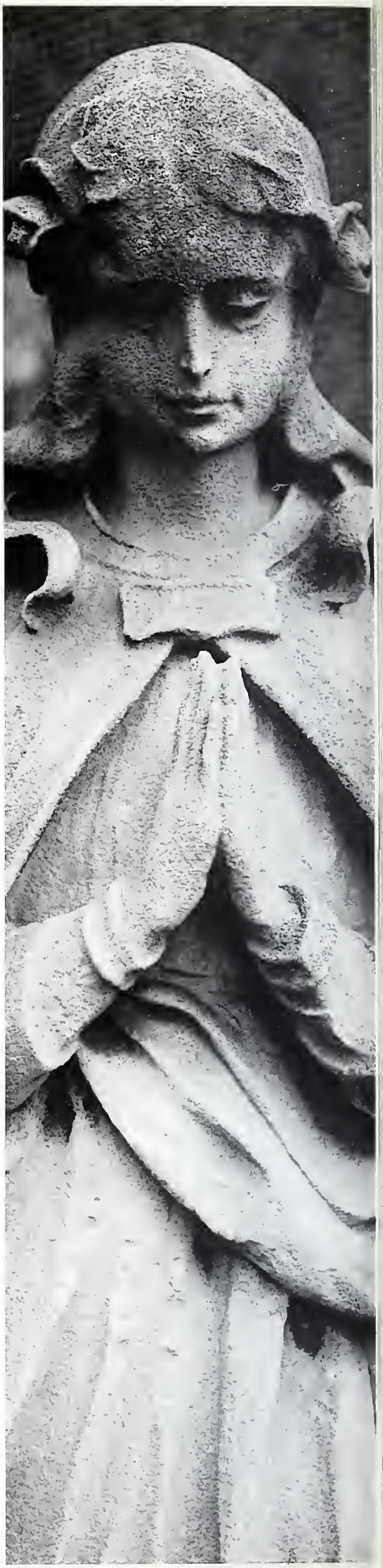

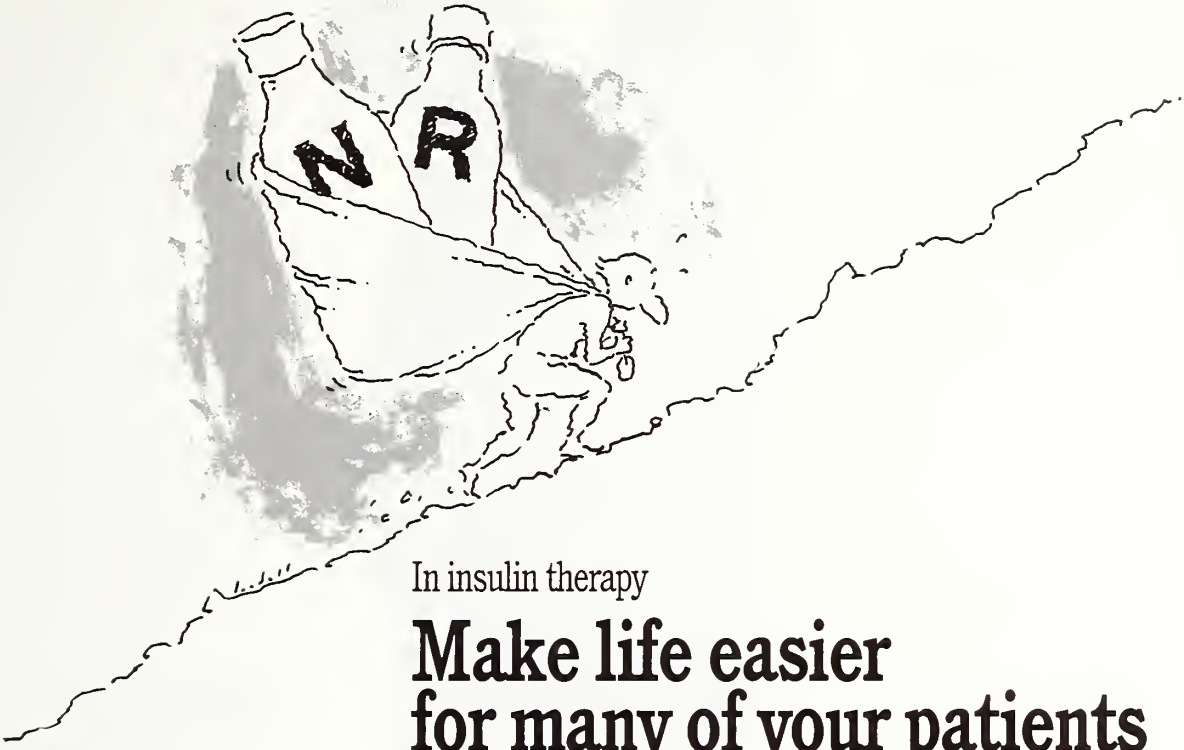

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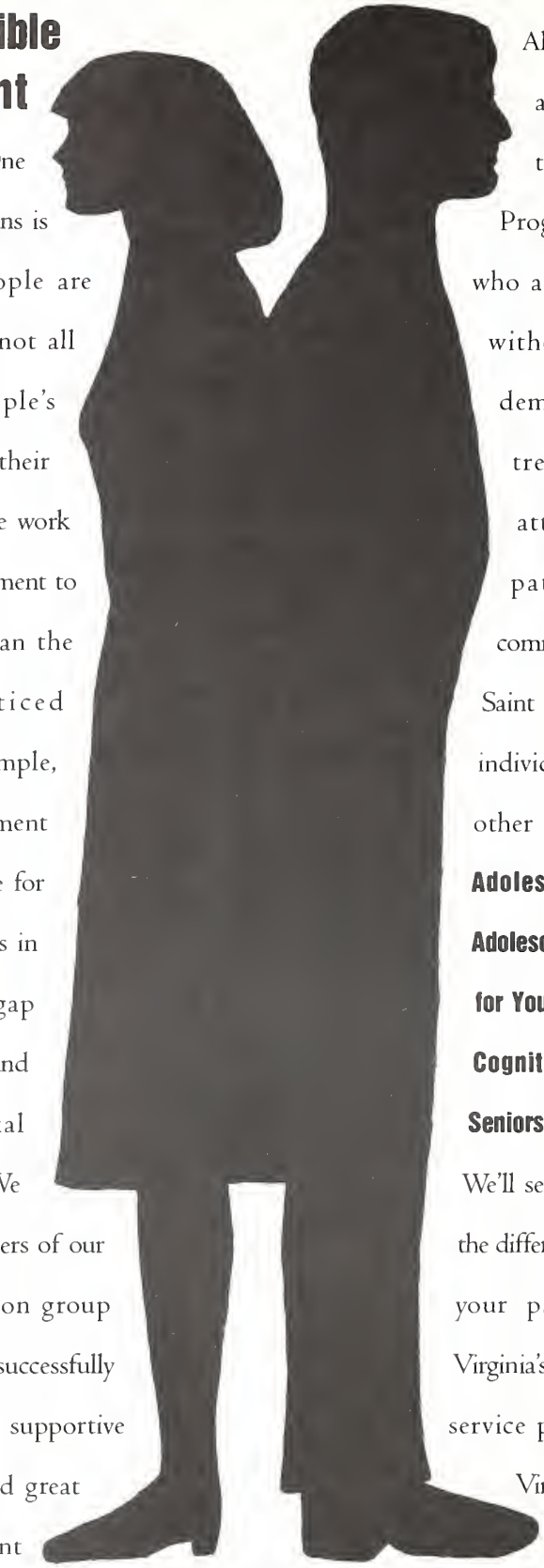

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Front Cover

A horse grazes in a lush green meadow in Webster County near Holly River State Park. Photo courtesy of *Scott Durham of Pineville.*

A historical perspective:

Four West Virginia doctors: Servants of the people

JOSEPH M. MILLER, M.D.
Retired Surgeon, Timonium, Md.

Editor's Note: *We wish to thank Dr. Miller for submitting this article to the West Virginia Medical Journal. Dr. Miller is in no way related to the Dr. Joseph Miller he discusses in this manuscript.*

In the formative years of the United States, many physicians, since they were better educated than most citizens, assumed leading roles in the civil government. For example, five doctors were among the signers of the Declaration of Independence and two physicians affixed their names to the Constitution.

These physicians must have thought as Plato did when he wrote that citizenship in a democracy meant participation in the mechanics of government. Unfortunately, the intervening years since the formation of this republic have witnessed a decreasing participation of medical men in governmental and even medical administrative affairs. Perhaps, the complexities of politics and the growth and specialization of medicine have combined to make the participation of doctors in civil affairs most difficult. The modern physician seemingly is unable to devote time to political leadership either on a national or local level.

On the early West Virginia scene, however, four physicians with a common interest, Drs. Jesse Bennett, Aquillo Leighton Knight, Joseph Miller and John Grubb, took part in governmental functions and were highly reminiscent of doctors of the Revolutionary period. Although they were not prominent on the national stage, they served their towns and the state of West Virginia with distinction. Dr. Jesse Bennett performed the first Caesarean section in the United States and these three other doctors made significant efforts to gain deserved recognition for him.

Dr. Bennett was born in 1769 in Pennsylvania, the son of a Revolutionary War patriot who died while in service in 1776. Subsequently educated in medicine in Philadelphia, he moved to Rockingham County in the Shenandoah Valley of Virginia to practice. There, he married and was the obstetrician for his wife, successfully delivering their daughter by Caesarean section on January 14, 1794.

Dr. Bennett made a short interlinear note about his feat in a report presented by Baudelocque (1). This was the only acknowledgement which Dr. Bennett made about the procedure at the time and it was given primarily for his own interest.

Later that same year, Dr. Bennett served as a surgeon's mate during the period of the Whiskey Rebellion (2). After moving to Kanawha County, he was appointed commander of a troop of cavalry by the governor of Virginia in 1804 (3). From 1805-1807, he served in the Virginia House of Delegates (4), and five years later Dr. Bennett became the company surgeon of the Mason County Riflemen. Summoned as a government witness in the trial of Aaron Burr for treason in 1807 (5), he was introduced during the proceedings, but did not end up testifying.

Dr. Bennett lived a long and useful life at his home in Point Pleasant on the Ohio River. He was a physician who recognized that he had a duty to his country and he served it well on many occasions.

Dr. Bennett's life and his surgical feat were brought to the attention of the medical world by Dr. Aquillo Leighton Knight, who knew the older physician quite well (6). Born in 1833 in the Point Pleasant area, Dr. Knight received his early education there and began studying medicine with a local doctor. He graduated from Western Reserve University in 1850, and practiced in the Point Pleasant area until 1861, when he became a surgeon in the Confederate Army. Captured by the Union, he was paroled until the end of the Civil War.

Dr. Knight was well versed in chemistry, botany, astronomy, geology, the classics, and general and medical history. He gave Dr. Bennett the first formal recognition for the Caesarean section when he reported the details of the operation in a "History of the Great Kanawha Valley."

Another driving force to obtain recognition for Dr. Bennett was supplied by Dr. Joseph Lyon Miller, who lived from 1875-1957 and was also born in the Point Pleasant area (7). Dr. Miller wrote that Dr. Knight was an active member of the Mason County Medical Society, the Meigs County (Ohio) Medical Society, the Ohio Valley Medical Society, and the West Virginia State Medical Association (8). Two or more times he was president of these three medical societies, and at one time he was vice-president of the WVSMA.

Dr. Miller's life and career strongly paralleled that of Dr. Knight's. The son of a druggist, Dr. Miller entered medicine almost in a natural manner. He was well educated, having attended the academic college at Barboursville, W.Va., the University of Tennessee and then graduating from the Medical College of Virginia in 1900. Except for a short period of time when he lived in Ashland, Ky., he spent all of his professional life in Thomas and delivered over 6,000 babies. In addition

to his medical practice, Dr. Miller owned the drug store in Thomas. He is described by those who knew him as a well respected individual who had a great knowledge of other fields, particularly medical history.

Dr. Miller practiced general medicine in Thomas for 55 years and had a special interest in obstetrical and gynecological history. He was councilman and mayor of Thomas and served on the school board. During his career, he was also vice president of the WVSMA (4) and a life member of the Historical Society of Virginia.

The Medical College of Virginia recognized Dr. Miller's intellectual pursuits by awarding him an honorary degree of letters in 1930. He also distinguished himself as a bibliophile and collector of rare medical books.

The third physician to bring Dr. Bennett's achievement to the public's attention was John McClure Grubb who lived from 1922-1989. Dr. Grubb obtained his early education in Charleston and he was named as an all-star football player at Charleston High School in 1939. He continued his studies at Butler University, but the intervention of World War II necessitated postponement of further instruction.

After the war, Dr. Grubb enrolled in West Virginia Weslyan College and he graduated in June 1947. He became a student at the Medical College of Virginia and received a doctor of medicine degree in 1951. Immediately following his graduation, Dr. Grubb completed a rotating internship and went into general practice. From 1961-1964, he was a resident in obstetrics and gynecology in Charleston and then practiced briefly in Kanawha City before moving to Point Pleasant in 1964, where he lived for the next 27 years.

In his entire practice, Dr. Grubb delivered nearly 10,000 babies and gave tremendous public service. He was the county coroner and the doctor for the local high school football team for many years. He served the American Cancer Society for 20 years, and was Medical Volunteer of the Year for the West Virginia Cancer Society in 1984, an honor which he also received two years later from the national organization. In addition, the West Virginia Public Health Association presented him with a Citizen's Award in 1986.

Dr. Grubb published a report on the Caesarean operation performed by Dr. Bennett and became intensely interested in securing proper recognition for him (9). In 1985, he spearheaded a successful effort to move Dr. Bennett's grave and tombstone from a remote area north of Point Pleasant to the Pioneer Cemetery in the town.

Each of these men was busy in the practice of medicine, yet found time to participate in local and medical politics. Surely, each anticipated and responded to a question later posed by John F. Kennedy, "Ask not what your country can do for you - ask what you can do for your country."

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Eating disorders among diabetics: A case report and literature review

JAMES P. GRIFFITH, M.D.
Assistant Professor of Internal Medicine and Psychiatry, West Virginia University Health Sciences Center, Charleston Division

Abstract

This report describes the challenging clinical problem of the coexistence of an eating disorder and diabetes mellitus in the same patient. Review of prior cases reveals young female, anorexic diabetics are most frequently reported. A review of previously published surveys indicates the prevalence of eating disorders among diabetics is 11 percent. Relevant clinical interactions from the biologic, psychologic and family perspectives are reviewed.

Introduction

The coexistence of an eating disorder and insulin dependent diabetes in one patient is a challenging clinical problem. This report presents the case of such a patient who was referred to the Charleston Area Medical Center for treatment. Previously reported cases will be reviewed, as will previously published surveys of this combination of illnesses. Relevant management issues of this difficult clinical problem will be discussed.

Case Report

A 30-year-old divorced white female was referred to our department from a rural mental health center. She reported a history of abnormal eating habits for approximately two years; she felt compelled to lose weight and also had frequent self-induced vomiting. Her weight had decreased from 115 pounds to 75 pounds during the last two years and she had been amenorrheic for one year. She also abused alcohol episodically. Her past medical history was completely negative. Her family history revealed alcoholism and "bulimia."

The physical examination revealed extreme dehydration and cachexia. Her weight was 73 pounds. Admission laboratory values were consistent with a hyperosmolar non-ketotic diabetic condition (Table 1). She was treated with intravenous fluid, insulin, diabetes education, a strict eating disorder behavioral protocol, and individual and group therapy. She gained 15 pounds during her stay and her abnormal eating behaviors improved. She would not, however, agree to long-term treatment and did not return for her outpatient appointment.

Table 1
Admission laboratory values

Na+	122	pH	7.43
K+	4.7	po2	90
Cl-	91	pCo2	37
CO2	24	HCO-3	25
BUN	16		
Glu	1018		

Discussion

Our patient is one of over 50 described in the literature who have had simultaneously occurring diabetes mellitus and an eating disorder (1,15) (Table 2). The majority of reported cases have been anorexic patients, probably because their weight loss becomes apparent to the clinician, while bulimic patients often go undetected (16). The vast majority (95 percent) of reported cases are female and relatively young (with an average age of 19.4 years). This is consistent with the segment of the general population thought to be at greater risk for eating disorders (17).

Among the reported cases, the onset of diabetes almost always precedes the development of the eating disorder (Table 3). Our patient is only the fifth patient reported to have either simultaneous onset of both disorders or to have an eating

Table 2
Cases of diabetes with eating disorders

Author	F	M	Anorexia	Bulimic	Mixed
Burch	1		1		
Neilson, et al	5		4	1	
O'Gorman, et al	1		1		
Hardoff, et al	1		1		
Hudson, et al	6	1	1	5	1
Powers, et al	4		4		
Roland, et al	2	1	2	1	
Hillard, et al	1			1	
Steel, et al	15		4	2	9
Malone, et al	1		1		
Brooks, et al	2		2		
Kopeski, et al	4			4	
Gomez, et al	2		2		
Fairburn, et al	3		3		
Garner		1	1		
Szmukler, et al	2	1		1	2
TOTALS	**51**	**3**	**27**	**15**	**12**

disorder precede the development of diabetes (1,8,11,12). Insulin purging (the deliberate reduction of insulin dose to produce glycosuria and weight loss) was mentioned in 23 cases (43 percent). Family problems were documented in 19 cases (35 percent), and were characterized generally as either neglectful or excessively enmeshed. Poor response to outpatient treatment, poor long-term outcome, coexisting depression, and poor self-esteem have often been noted among these cases (1,16).

A number of surveys attempting to identify patients with eating disorders among diabetics have been conducted (Table 4) (8,16,19-23). As shown in the table, the prevalence of eating disorders among diabetics has varied considerably. Structured questionnaires (i.e., EAT, EDI) have most frequently been utilized in these studies. Since they may contain items which indicate appropriate behaviors for diabetics (i.e., avoiding foods with sugar, knowing the contents of food), high scores may not truly indicate an eating disorder, and the reported prevalence be falsely elevated (18). Accurate estimates of the prevalence of eating disorders among diabetics is further limited by patients' characteristic reluctance to disclose pathologic eating habits. Furthermore, because anorexia nervosa is a relatively rare disorder, using a screening instrument like the EAT poses methodologic problems and will generate a large number of false positive cases (24). Some studies have attempted to overcome these problems by performing clinical interviews (8,19,21), or by eliminating items from screening which reflect normal behaviors for diabetics (20). A summary of these studies are shown in Table 5.

Other studies have attempted to address the issue of subclinical eating disorders among diabetic patients (18,25,26). These studies suggest that a significant portion of diabetic patients have abnormal eating attitudes or behavior that can be as high as 85 percent with "occasional" binging (26), or cope with stress by manipulating their insulin dosage in pathologic ways.

Management of these patients is made difficult by the complex interaction of biologic, psychologic and family-related factors (27). Increased insulin binding to insulin receptors (26) may explain the clinically observed heightened insulin

Table 3
Temporal relationships between eating disorders and diabetes

	Eating Disorder Precedes Diabetes	Diabetes Precedes Eating Disorder
Anorexic/Diabetic N=27	4%	96%
Bulimic/Diabetic N-15	14%	86%
Mixed Eating D/O N=12	0%	100%

Table 5
Surveys of eating disorders among female diabetics

	Prevalence of Eating Disorder	Anorexic	Bulimic	Mixed
(8,36,29-23) **All Studies**	14%	1.6%	8.7%	3.7%
(19,30,31) **Studies Utilizing Clinical Interview**	11%	3.5%	2.7%	4.8%

Table 4
Surveys for eating disorders among diabetics

AUTHOR	N	AVERAGE AGE (YR)	DURATION OF DIABETES (YR)	% WITH EATING DISORDER	TYPE OF EATING DISORDER (%) Anorexic	Bulimic	Not Specified, Mixed Borderline	METHOD
Hudson, et al (1985)	80(F)	18.4	8.4	38	0	35	3	Self-Admin. Questionnaire
Rodin, et al (1985)	46(F)	17.2	8.4	19.7	6.5	6.5	6.7	EDI, EAT-26 Interview
Rosmark, et al (1986)	41(F) 45(M)	28.3 28.4	13.4 13.4	9.7 0	4.8	2.4	2.4	EAT EAT-36
Steel, et al (1987)	208(F)	16-25	NR	7.2	1.9	1	4.3	Direct Inquiry
Rodin, et al (1986)	58(F)	17.6	8.4	20.7	6.9	6.9	6.9	EDI, EAT-26 Interview
Stancin, et al (1989)	59(F)	NR	22	0	0	12	10	EDI, SCL-90-R
Birk, et al	385(F)	28.2	12	18.3	1.0	13.1	4.2	Self-Admin. Survey

EAT -Eating Attitudes Text
EDI -Eating Disorder Inventory
SCL-90-4 -Symptom Checklist-90-Revised

sensitivity (29) seen in anorexic patients, and necessitates caution when initiating insulin therapy in anorexic diabetic patients. Our patient also serves as a reminder to consider undiagnosed diabetes as a complicating or comorbid condition in patients presenting for initial treatment of anorexia nervosa. Dysregulation of the hypothalamic-pituitary-adrenal axis (30), altered growth hormone levels, and delayed gastric emptying (31) are other biological factors seen in patients with eating disorders that could affect diabetes management.

Excessive preoccupation with food and the struggle between autonomy and dependence are two psychological issues commonly seen among both eating disordered and diabetic patients (5). For the dually affected patient, these issues become even more significant during individual and family therapy. Denial of illness is observed frequently in this patient population, and can be managed with education and by developing a trusting therapeutic alliance with the patient (5). Thorough family assessment and therapy is essential to identify and alter unhealthy relationships which may be deleterious to the patient's clinical status.

Conclusion

Eating disorders among diabetics are not uncommon. Proper management requires consideration of biological, psychological and family issues (27). There likely exists a clinical continuum on which these two co-morbid conditions interact; with many diabetics having no evidence of an eating disorder, an intermediate number having some features of one (i.e. "subclinical"), and a smaller number who clearly suffer from an eating disorder.

Acknowledgements

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Multiple colonic polyps as the initial presentation of malignant melanoma

STEVEN J. JUBELIRER, M.D.
Medical Director, Cancer Center of Southern West Virginia, Charleston Area Medical Center; and Clinical Professor of Medicine, Division of Hematology-Oncology, West Virginia University, Charleston Division

Abstract

A 72-year-old-man was admitted to the Charleston Area Medical Center with a one-month history of mild anemia and positive stools for occult blood. A prior UGI series, small bowel series, and barium enema were normal. A colonoscopy revealed 12 sessile, non-pigmented colonic polyps, two of which were removed and sent for histologic examination. The final pathology report revealed malignant melanoma. Physical examination revealed no obvious evidence of skin lesions or melanoma elsewhere. Subsequent staging, which included a chest X-ray, a CT scan of the abdomen and brain, UGI endoscopy, and bone scan revealed a metastatic disease. The colonic lesions regressed in response to combination chemotherapy, and the patient's transfusion requirement decreased. However, the patient died of brain metastases 10 months after the initial diagnosis.

This case emphasizes the fact that:

1. Metastatic lesions of the gastrointestinal tract may be the initial manifestation of malignant melanoma and may occur in the absence of a clinically obvious lesion;

2. Colonic metastases may simulate simple polyps endoscopically, particularly if they are non-pigmented;

3. Biopsy and histologic examination of any colonic polyp is essential in patients with a prior history of melanoma; and

4. Regression of gastrointestinal lesions from melanoma and subsequent clinical improvement may occur in response to chemotherapy.

Introduction

Malignant melanoma involving the gastrointestinal tract is an uncommon and often occult lesion (1-8). Although primary gastrointestinal melanoma may occur, the vast majority of gastrointestinal melanomas are metastatic from a known or occult primary cutaneous lesion. The small bowel is the most common site of involvement; gastric metastases are less common, and colonic metastases are rare (1-8).

This report documents the author's recent experience with a patient with malignant melanoma presenting initially as multiple colonic polyps.

Case Report

A 72-year-old male was admitted to the Charleston Area Medical Center in February 1988 with a one-month history of fatigue and dyspnea on exertion. He had a past history of histologically confirmed adenomatous colonic polyps, and recent tests of his stool for occult blood were persistently positive.

Two weeks prior to admission, an air-contrast barium enema, UGI series, and small bowel series were performed and found to be normal. One week prior to admission a colonoscopy was performed and revealed 12 small, sessile, non-pigmented polyps, ranging in size from 0.3 cm. to 1 cm. throughout all levels of the colon. None of these were actively bleeding. Two of these polyps were removed and submitted for histologic and electron microscopic examination.

These surprisingly revealed that the "polyps" represented malignant melanoma. When the patient was asked again about his past medical history, he revealed that two dark lesions had been removed from his back and upper abdomen 26 years earlier. The histologic sections of those lesions, however, were not available for review.

The patient's examination on admission was unremarkable except for obesity, pallor, and a small three-centimeter upper abdominal scar. No cutaneous or other primary lesions could be detected. The stool for occult blood was positive. The hematocrit was 32.8, hemoglobin 10.7 gm/dl, serum iron 27 mg/ml, serum iron-binding capacity 440 mg/ml, serum ferritin 18 ng/ml and erythrocyte sedimentation rate 60 mm/hr. The serum alkaline phosphatase, transaminases, and calcium were normal. The chest X-ray; computerized tomography of the abdomen and brain; bone scan; and gastroscopy revealed no metastatic disease. At that time, a decision was made to defer systemic therapy and follow closely. Ferrous sulfate was prescribed.

In April 1988, due to persistent melena and anemia requiring weekly red-cell transfusion, this patient was started on monthly combination chemotherapy consisting of Vinblastine, Dacarbazine and Cisplatin. After two courses of therapy, his transfusion requirement decreased from two units weekly to three units monthly, and his melena resolved. Repeat colonoscopy in June 1988 revealed a decrease in the number (i.e. 10 to five) and size of lesions. The two largest lesions (approximately 1 cm. in diameter initially) had decreased to approximately 0.4 cm. and 0.6 cm. respectively. Chemotherapy was discontinued in August 1988 because new metastatic melanoma skin nodules were noted.

In September 1988, the patient was readmitted with a three-week history of lower extremity weakness and intermittent confusion. A brain CT scan revealed two metastatic lesions in the right occipital region with surrounding edema. He received dexamethasone and whole brain radiotherapy (3000 rads/10 treatments). Despite this therapy, the patient exhibited a progressive deterioration in his clinical course with the development of seizures, left hemiparesis and eventual coma. He died in December 1988, and no autopsy was performed.

Discussion

Clinically diagnosed malignant melanoma of the colon is reportedly rare. Das Gupta and Brasfield (1) reported only one case of symptomatic colon metastases in more than 1,000 patients with cutaneous melanoma. Reintgen and colleagues

(2) found that in a series of more than 2,500 patients with cutaneous melanoma, premortem identification of colonic metastatic disease had been made in less than one percent (16 of 2,500). Goodman and Karakousis (3) reported on 16 patients with symptomatic melanoma of the gastrointestinal tract. Fifteen melanomas were located in the small bowel, one in the stomach, and none in the colon. In a series of 320 patients with cutaneous melanoma, Jorge and colleagues (4) found only one case of metastatic melanoma of the colon of the 15 patients with gastrointestinal metastases. In a radiologic study of 67 patients with endoscopic and/or surgery-documented gastrointestinal (GI) tract metastases, Goldstein and colleagues (5) demonstrated colonic involvement in only three. In addition, Willbanks and Fogelman (6) found isolated colonic involvement in three of 18 patients with symptomatic metastatic melanoma of the GI tract.

The incidence of colonic metastases is probably much higher than suggested by most antemortem studies. Das Gupta and Brasfield reviewed 100 autopsies of patients who died from melanoma and found that 22 percent had colonic involvement (1). This discrepancy between the clinical and post-mortem incidence of gastrointestinal metastases may be related to both the relatively infrequent occurrence of specific abdominal symptoms during life, and to the relative insensitivity of routinely employed radiologic techniques (i.e. barium enema or UGI series).

When barium studies have identified GI tract melanoma, a wide spectrum of abnormalities have been described. The largest diversity of radiologic presentations occurs in the small intestine (5). Usually there are multiple mural nodules, although some patients have large, excavated or ulcerated masses (5,9,10,11). In the stomach and duodenum, intramural nodules are the most commonly encountered form of metastases, but almost half of these have a central ulceration or umbilication. These lesions can have a "bulls-eye" or "target" appearance when the barium occupies the ulcer cavity (9,12,13). Colonic metastases are generally multiple submucosal nodules but may rarely present as an infiltrating mass (1,5,7).

The most common initial signs and symptoms in the reported cases (1,2,4,6,7) have been obstruction (i.e. abdominal pain and disention), gastrointestinal blood loss (particularly anemia and melena), and palpable mass. The diagnosis was made by barium enema, colonoscopy with biopsy, and/or surgery. Histologically, the colonic metastases were melanotic or amelanotic and were single or multiple. The time interval between diagnosis of the primary lesion and subsequent diagnosis of the colonic lesions has been variable in reported cases, ranging from 1 1/2 years to 20 years.

This case is of interest in several respects. It reemphasizes the fact that gastrointestinal metastases may represent the initial manifestation of malignant melanoma and these may occur in the absence of a clinically obvious primary lesion. Moreover, it demonstrates that the colonic metastases may simulate simple polyps both clinically (i.e. anemia and melena) and endoscopically. The previous literature (6,14) has indicated that these metastatic polypoid lesions may often be amelanotic or may contain enough pigmented granules to be clearly identified microscopically, but not on gross examination. For this reason, biopsy and microscopic examination of colonic "polyps" is essential in all patients with a prior history of cutaneous melanoma. Finally, this case illustrates that regression of gastrointestinal tract metastatic lesions from melanoma may occur in response to combination chemotherapy and result in clinical improvement (i.e. decreased bleeding and transfusion requirement).

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Renal transplantation at the Charleston Area Medical Center: The first 100 patients

W. SUSIE MATULIS, M.D.
GAIL COKELY, R.N., B.S.N.
MELISSA MATULIS
ELIZABETH FUNK, M.D.
Section of Infectious Diseases, West Virginia University School of Medicine, Charleston Division; and Renal Transplant Department, Section of Infectious Disease, Marshall University School of Medicine, Huntington

Abstract

In March 1987, there were 500 patients on chronic dialysis in the Charleston area. No transplant centers were available within 150 miles and referral to out-of-state facilities was difficult. A joint program between the Charleston Area Medical Center and the Cleveland Clinic Foundation made renal transplantation available locally. From September 1987 through August 1991, 100 transplants were performed in 98 patients.

A retrospective analysis of these patients was performed in November and December of 1991 to obtain the basic demographics of the program and compare them to statistics from larger centers. This article details the results of this review.

Introduction

The incidence of end stage renal disease (ESRD) in West Virginia has consistently been higher than the national average. This is due in part to its rural location and lack of preventive and routine health care. Economic recession, lack of funding and personal hardship has made referral of these patients to out-of-state transplant centers difficult. Local programs have been only intermittently available and have not been adequate to meet the needs of the state's ESRD population.

In March 1987, there were 500 patients on chronic dialysis within the Charleston area. At that time, there was no transplant center within 150 miles of the Charleston Area Medical Center (CAMC), which is a 960-bed community hospital in Charleston. A joint program was then begun between CAMC and the Cleveland Clinic Foundation which made renal transplantation available locally. From September 1987 through August 1991, 100 renal transplants were performed in 98 patients.

In November and December of 1991, we conducted a retrospective chart review of these 100 transplants to define the basic demographics of the program and to compare aspects of our ESRD population and transplant data to reported national statistics.

Sixty-eight cadaveric and 32 living-related renal transplants were performed in 60 men and 38 women. The patients ranged in age from 8 years to 71 years with a median age of 49 years and a mean age of 40 years. Comparison of these gender and age ratios to those published by the United Network of Organ Sharing (UNOS) (1), can be seen in Figure 1.

Figure 1. Comparison of gender and age ratios of transplant recipients at CAMC with figures of the United Network of Organ Sharing (UNOS)

GENDER	CAMC	UNOS
male	62%	60.8%
female	38%	39.2%
AGE		
0 - 5 yrs.	0%	0.8%
6 - 19 yrs.	8%	5.6%
20 - 44 yrs.	52%	55%
45 - 64 yrs.	36%	35.8%
65 + yrs.	2%	2.8%

Figure 2. Comparison of etiologies leading to end stage renal disease

ESRD ETIOLOGY	CAMC	UNOS
Chronic Glomerulonephritis	19%	32%
Interstitial Nephritis	1%	3%
Diabetes Mellitus	25%	27%
Polycystic Kidney Disease	10%	10%
Nephrosclerosis/ Hypertension	22%	9%
Others	23%*	19%

*Included 7 patients with lupus nephritis, 3 with obstructive uropathy, 2 each with Goodpasture's Syndrome, Alport's Syndrome, pyelonephritis and reflux nephropathy.

The underlying etiologies leading to end stage renal disease in these patients were diverse, but 66 percent could be accounted for by diabetes, hypertensive nephrosclerosis, and chronic glomerulonephritis. The most striking difference in this data compared to etiologic information from UNOS (1) is the greater than two-fold increase in the incidence of hypertension in the CAMC population (Figure 2).

The overall patient survival rate during the four-year period studied was 90 percent. Of the 10 deaths, two occurred in living-related recipients and eight in cadaveric transplant patients. None of these deaths were directly related to graft failure.

Graft survival for the same period was 88 percent. Two kidneys from living-related donors were lost in the immediate post-op period due to acute thrombosis. The remaining graft failures occurred in cadaveric transplants over varying periods postoperatively. None of these incidences of graft failure resulted in death.

At the completion of the study, 94 percent of the living-related grafts were still functioning with one patient

Figure 3. Graft survival rates

Months After Transplant	Cadaveric	Living Related
3 months	97%	94%
6 months	95.5%	94%
12 months	94%	94%
24 months	89.7%	94%
44 months	85%	94%
End of study period	85%	94%

Figure 4. Patient Survival Rates

Months After Transplant	Cadaveric	Living Related
1 month	95%	100%
2 months	94%	100%
6 months	92.5%	96.8%
10 months	89.7%	93.7%
18 months	88%	93.7%
End of study period	88%	93.7%

Figure 5. Graft failures vs. ESRD etiology

Diagnosis	Number of Patients	%
Hypertension	3 pts.	25%
Alport's Syndrome	2 pts.	16.6%
Obstructive Uropathy	2 pts.	16.6%
Polycystic Kidney Disease	1 pt.	8.4%
Diabetes	1 pt.	8.4%
Lupus Nephritis	1 pt.	8.4%
Interstitial Nephritis	1 pt.	8.4%
Bright's Disease	1 pt.	8.4%

Figure 6. Risk factors for rejection

Number of Risk Factors	Number of Patients	Rejection Episodes
0	9	6
1	26	16
2	44	44
3	21	29
4	1	1

Total of 96 rejection episodes in 56 transplants.

Figure 7. Rejection episodes related to transplant match

A – match	(6 antigen match)	-11%
B – match	(5 antigen match)	-2%
C – match	(4 antigen match)	-5%
D – match	(3 antigen match)	-16%
E – match	(2 antigen match)	-20%
F – match	(1 antigen match)	-26%
G – match	(total mismatch)	-20%

Figure 8. Donor – Recipient match

Type of Match	Number of Transplant Patients
A – 6 antigen match	16
B – 5 antigen match	1
C – 4 antigen match	7
D – 3 antigen match	17
E – 2 antigen match	17
F – 1 antigen match	26
G – 0 antigen match	15

at 51 months after transplant. Eighty-five percent of the cadaveric transplant population had functioning grafts (Figure 3). Patient survival for the two groups was 94 percent and 88 percent respectively (Figure 4). No correlation could be made between graft failure and underlying etiology of ESRD (Figure 5).

There were a total of 96 rejection episodes in 56 transplants. Our study evaluated four areas known to increase the likelihood of rejection: diabetes, previous transplantation, prior blood transfusions, and percent of reactive antibodies.

Thirty-two percent of the patients were diabetic; 10 percent had previous transplants (which compares to 15 percent of UNOS patients with previous transplants); 86 percent had prior blood transfusions ranging from one to 50 units, and 51 percent had the presence of reactive antibodies (range 2 percent to 100 percent). This final test measures the recipient's antibodies against a panel of antigens likely to be present in the donor population. The higher the percentage of reactive antibodies, the higher the chance of rejection. Figure 6 shows the relationship between the number of rejection risks present compared to the rejection episodes experienced by our transplant population. In addition, we reviewed these rejection episodes in relation to the donor recipient antigen match of the graft. It is not particularly surprising that a larger percentage of rejection episodes occurred in the poorer matched kidneys (Figure 7). The donor-recipient antigen match for the entire transplant population is shown in Figure 8. An "A" match denotes a 6 antigen match between donor and recipient. Each progressive letter match denotes less antigen compatibility. The letter "G" depicts total antigen mismatch.

No correlation was found between the underlying etiology of ESRD and the number of rejection episodes.

Although the renal transplant program at CAMC is still relatively new and the numbers are small, its success in terms of patient and graft survival compare very favorably with larger centers. In addition to providing state-of-the-art medical care to this group of patients, its impact has also been great in terms of increasing the number of the area's ESRD population that can be offered transplantation.

The program has allowed families to provide comfort and support to the patient, as well as each other in a setting close to home. As the program continues to grow and succeed, it may lead the way to more innovative programs in a community setting. This will ultimately increase the care offered to West Virginia's rural population and meet some of the state's special needs.

Acknowledgements

We wish to acknowledge the following employees from the Medical Research Department at CAMC for their assistance: Dr. Sandra Magnetti, director; Donn Hanshaw, research specialist; and Lee Edwards, computer specialist. In addition, we would like to thank Sherry Lawson for her tremendous help in conducting chart review, gathering data and typing the manuscript.

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Use double spacing throughout, including (in the following order) title page, abstract, text, acknowledgements, references, tables, and legends for illustrations. Begin each of the following sections on separate pages: title page, abstract, text, acknowledgments, references, individual tables, and legends for illustrations. Number pages consecutively, beginning with the title page. Type the page number in the upper right-hand corner of each page.

All persons designated as authors should qualify for authorship. Each author should have participated sufficiently in the work to take public responsibility for the concept.

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Tables (tabular listings) and figures (photos, drawings and charts) should be numbered and the point of reference in the text indicated in parentheses, i.e., (Table 1), (Figure 1).

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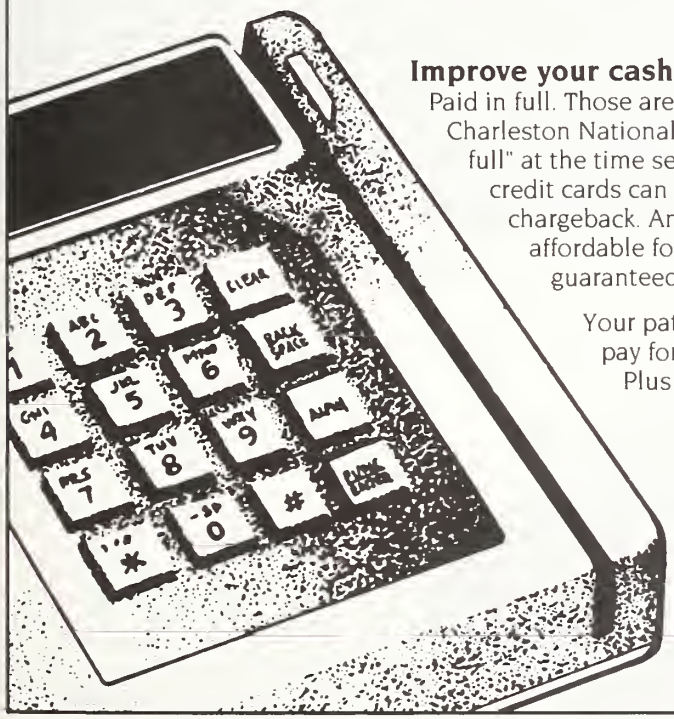

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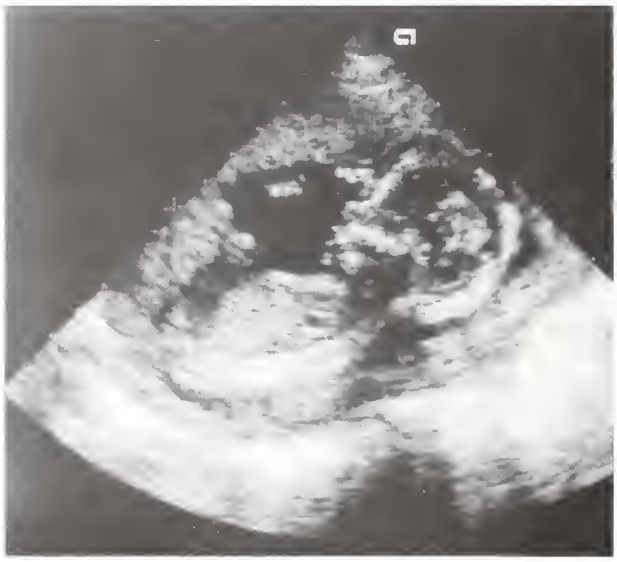

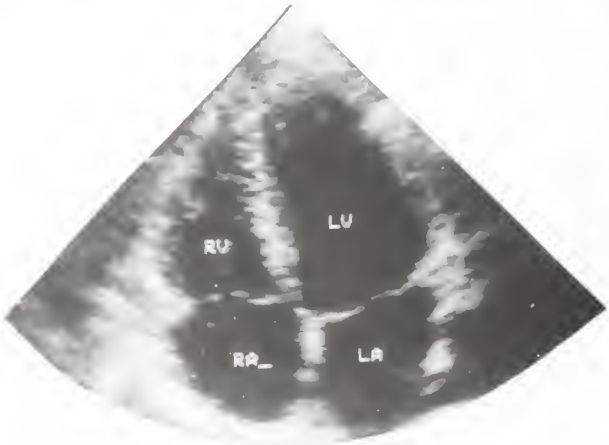

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President's Page

Constantino Y. Amores M.D.

Annual Meeting awaits you

Dear Fellow Physicians:

We have exciting sessions planned for you at the WVSMA's Annual Meeting at The Greenbrier, August 19-22.

The objectives of this year's meeting are to increase your awareness and knowledge of the diagnosis and treatment of the new tuberculosis, improve your knowledge of multiple trauma and its socio-economic repercussions, and of course help you gain a better understanding of Governor Caperton's Health Care Planning Commission.

On Wednesday, the Honorable Governor Gaston Caperton will give the Thomas L. Harris Address. On the same afternoon, Roger M. Des Prez, M.D., Professor of Medicine at Vanderbilt University and Chief of Medical Services at Veterans Administration Hospital in Nashville, Tenn., will give the Edmund B. Flink Address. His topic will be "The New Tuberculosis."

Thursday promises a very informative session on the "Practice of Medicine in West Virginia After the Health Care Planning Commission." This panel will be moderated by WVSMA Councilor-at-Large Derrick L. Latos, M.D., and you will be given an opportunity to ask questions regarding the Health Care Planning Commission. This commission will have a significant influence on what the practice of medicine will be in West Virginia in the future.

Friday's session is dedicated to the subject of "What's New in Trauma?" and it will cover trauma's socio-economic impact and its influence on various medical specialties.

The WVSMA Auxiliary promises an entertaining Friday evening. Be sure your spouse is aware of it.

John L. Clowe, M.D., President of the American Medical Association, will give his address Saturday. His topic is entitled "Communicating Compassion." The afternoon will be highlighted by the induction of your new state officers.

I am writing this letter to personally appeal to you to make a special effort to attend the WVSMA Annual Meeting. Your involvement can be rewarding to you and definitely to organized medicine. The more involved you are, the more you understand our problems in the practice of medicine today, and the more you can help the profession as a whole.

Come and join us.

Constantino Y. Amores, M.D.

Life as melodrama

Somewhere, somehow the idea and the conviction crept in amongst us that life is supposed to be, must be, was perhaps designed to be an unfolding melodrama. The conclusion then follows easily that if melodrama is lacking there is something wrong with one's life, something needs changed, a new wife or husband or just a new love affair, a new job, a new location, a new lifestyle, a new something, "so that my life too can be fulfilling and relevant."

Education probably started it, teaching everyone to read and all that. Literacy created a market for things to read – and who wants to read history books or economic reports or minutes of committee meetings? Melodrama was and is the answer. The novel was invented – had to be invented because ordinary life is just too stodgy to be made exciting.

Of course, you really don't even have to be literate anymore to thrill to the passionate romance of packaged TV melodrama. Even the quiz shows have melodrama and suspense.

Will that brave contestant guess the proper letter before the buzzer goes off to deny him the opportunity to drive off into the sunset in his brand new sports car?

Will that closet eidetic memory expert be able to correctly name the genus of New Caledonian wart hogs?

Any prizes to be awarded, however, for sheer innovation and creativity in bringing melodrama to the eager public have to go to our news gatherers so ably represented in all of the communications media. These artists daily, even hourly, must make the humdrum events of life into exciting, frequently suggestive or salacious fare certain to capture sufficient attention for the high-priced advertisements interlacing their creative efforts, in order that these and the revenues therefrom will be continued and thus reward their artistic genius.

Medical lore, medical literature and science in general is swept up into the process so that, like meat going into one end of a grinder and coming out the other as sausage, some significant violence and distortion occurs. Consider the melodrama in a research laboratory with its myriad of pipettes, Bunsen burners, test tubes and assorted confusing gear. Who would pay money more than once to witness the ordinary operating room routine of any hospital? It takes true genius to jazz up for public consumption the cruel fate of hapless AIDS patients.

It's a phony life that is presented to us for imitation. Impossible comparisons between ourselves and our resources with characters arising from the imagination of a writer or a group of writers are the sources of major discontent and unhappiness. Our hopes and ambitions are manipulated cruelly as a part of this cynical process. No one is inclined to turn back the clock on what is declared progress except, perhaps, the environmentalists, and even their success has been built precisely on making biological existence itself a fitting melodrama. We simply have a torment with no relief, an itch with no remedy.

To remain in the field of literature, it somehow seems more fitting and accurate to compare living one's life with an ongoing construction of a poem rather than a melodrama. Life is so full of ambiguities that one must be willing and prepared to engage in serious reflection and introspection in order to affix meaning to the many surprises we manage to contrive. There is rhythm, there is purpose, there is meaning to any life. To discover these, one needs rid of the nuisance of distracting melodrama so abundantly and nauseatingly provided by all of our communications media.

–SDW

At Annual Meeting

Caperton to deliver Harris Address; Vanderbilt professor to present Flink lecture

Governor Gaston Caperton will present this year's Thomas L. Harris Address, "Health: West Virginia's Future," at the WVSMA's 125th Annual Meeting at The Greenbrier, August 19-22. Following the Harris Address, Roger M. Des Prez, M.D., professor of medicine at Vanderbilt University, will speak on "The New Tuberculosis," for the Edmund B. Flink Address.

These two presentations will be given during the First Session of the WVSMA House of Delegates. The Harris Address was initiated at the WVSMA's Annual Meeting in 1973 to honor Dr. Thomas L. Harris who was president of the WVSMA from 1945-46. Dr. Harris attended WVSMA Annual Meetings faithfully because he firmly believed in their value to the practicing physician. In his will, he established a trust fund to be used to enhance the members interest in the WVSMA Annual Meeting, and the membership has decreed that the funds be spent to provide an outstanding speaker to keynote the meeting.

The Edmund B. Flink Address was established by Councilor-at-Large Derrick L. Latos, M.D., F.A.C.P., two years ago when he was president of the WVSMA, to honor Dr. Flink, a professor emeritus at WVU. Dr. Flink was chief of medicine for 16 years at WVU and then in 1976 became a Benedum professor at WVU, where he also still serves as an attending physician at the WVU Health Sciences Center. During his career, Dr. Flink had a major influence on medical education for many physicians in the state including Dr. Latos who had been one of his students. Dr. Latos created the Flink Address not only to recognize Dr. Flink, but to provide an annual internal medicine lecture on a topic that had not only profound historic value, but also had current implications on the practice of medicine.

Caperton

Des Prez

Information on Governor Caperton and Dr. Des Prez begins below and additional details about the WVSMA Annual Meeting are available by calling Nancie Divvens at 925-0342.

Speakers highlighted

Governor Caperton is a 1963 graduate of the University of North Carolina where he earned a bachelor's degree in business. Prior to his election to governor in 1988, he served as president and chief executive officer of the McDonough Caperton Insurance Group in Charleston.

Shortly after taking office in 1989, Governor Caperton gained passage of one of the nation's toughest ethics laws and reorganized 131 government agencies into seven major departments, saving taxpayers more than $100 million. His fiscal reforms have moved the state from a $500 million deficit to a balanced budget.

Governor Caperton has launched an extensive education reform program that includes a $200 million school construction and renovation three-year, $5,000 pay raise for teachers; and a 10-year, $70 million basic skills computer project to place a computer in every elementary classroom in West Virginia.

In recognition of his commitment to education, Governor Caperton was named chair of the Southern Regional Education Board. He was also elected chair of the Southern Growth Policies Board and the Southern Corporate Coalition to Improve Maternal and Child Health.

In 1991, Governor Caperton led the fight for legislation strictly limiting the size of landfills and requiring recycling programs. He also achieved new legislation protecting the state's groundwater.

Last summer, Governor Caperton announced that the state would receive a $6 million grant from the Kellogg Foundation to establish a model program for rural health care delivery. The grant includes funding for three primary care clinics and Governor Caperton has made plans for six additional primary care facilities throughout the state.

Another important part of Governor Caperton's agenda has been economic development. Through the Partnership for Progress program, he is bringing together business, labor, education and government to capitalize on regional strengths and prepare workers for the high-tech jobs of the future. He is committed to building economic ties with Japan and last year, West Virginia became the first state to open a trade office in the city of Nagoya, Japan.

Dr. Des Prez was born in Chicago and received his medical degree from the Columbia College of Physicians and Surgeons in New York City. From 1954-57, he completed his internship and residency at The New York Hospital.

Following his internship and residency, Dr. Des Prez taught at Cornell University Medical College as an instructor in medicine for five years. In 1956, he became a teaching fellow for the American Trudeau Society and then worked for two years as a physician at the Fort Defiance Tuberculosis Sanatorium.

From 1959-63, Dr. Des Prez served as the Edward Livingston Trudeau Fellow of the American Trudeau Society and was a physician for outpatients at The New York Hospital. In 1962, he returned to Cornell and taught as an assistant professor of medicine for a year before relocating to Nashville to accept a post as an associate professor of medicine at Vanderbilt University School of Medicine. He held this position for five years and was also chief of medical service for Veterans Administration Medical Center in Nashville before he was promoted in 1968 to his current role as professor of medicine at Vanderbilt.

Active in many professional organizations, Dr. Des Prez is a diplomate of the American Board of Internal Medicine and the Subspecialty Board of Pulmonary Diseases, as well as a member of Phi Beta Kappa, Alpha Omega Alpha, the Southern Society for Clinical Investigation, the American Society for Clinical Investigation, the Association of American Physicians and the Association for VA Chiefs of Medicine. The editor of the chest section of the *Year Book of Medicine,* Dr. Des Prez is a noted author who has published over 100 articles and abstracts.

Public Health Association to hold Annual Meeting

The 68th Annual Meeting of the West Virginia Public Health Association is entitled "Mission of Public Health - Healthy West Virginians in the Year 2000," and is set for September 15-18 at the Gateway Holiday Inn Conference Center in Barboursville.

The First General Session will begin on Tuesday, September 15 at 1 p.m. with opening remarks from Mary L. Hudson, president of the WVPHA. A session called "Vision for the Future Revised" will then be conducted featuring presentations by William T. Wallace Jr., M.D., M.P.H., commissioner of the Bureau of Public Health; Mary Huntley, director of the Office of Community and Rural Health Services; Pat Moss, director of the Office of Maternal and Child Health; Alan Holmes, director of the Office of Epidemiology and Health Promotion; Frank Lambert Jr., Dr. P.H., of the Office of Laboratory Services; and Joseph Schock, director of the Office of Environmental Health Services. Following a break, the meeting will reconvene with discussions on "Rural Health Activities: Legislation and New Initiatives," "Pediatric Services/EPSDT/PAAS Program: Recent Changes," and "Injury Control and Health Promotion.

On Wednesday, the Second General Session will start with a keynote address by Mark Magenheim, M.D., of Sarasota County, Florida, entitled "Utilizing APEX/PH, Model Standards, PATCH, and Related Planning Instruments." Other addresses that morning will highlight "National Healthy 2000 Objectives" and "National Health Care Reform."

The agenda for Wednesday afternoon and Thursday morning and afternoon consists of a wide variety of section meetings and workshops. The Third General Session is scheduled for 6 p.m. Thursday with the President's Reception and the annual banquet followed by a dance. The meeting will then conclude Friday at noon after the Fourth General Session which will include a legislative forum.

CEU and CME credits will be offered at the conference. In addition to the educational and business sessions, several sightseeing, social and recreational activities are planned.

For more information about the meeting, contact Susan K. Morgan at 366-3360.

Update on accredited mammography facilities

In the April issue of the *Journal,* a scientific article entitled "The Supply of Mammography Resources in West Virginia" was published which was written by David Artz, who is now a third-year medical student at the WVU School of Medicine. In this report were statistics based on the number of mammography facilities in the state accredited by the American College of Radiology (ACR) as of August 1991.

Since August 1991, 13 more mammography facilities have been accredited by ACR in West Virginia and they are as follows:

Beckley Appalachian Regional Hospital	– Beckley
Cabell Huntington Hospital, Inc.	– Huntington
Davis Memorial Hospital	– Elkins
Grafton City Hospital	– Grafton
Greenbrier Physicians Incorporated	– Ronceverte
Medbrook Medical Center	– Bridgeport
Mingo Pike Radiology, Inc.	– Williamson
Preston Memorial Hospital	– Kingwood
Princeton Community Hospital	– Princeton
St. Joseph's Hospital	– Parkersburg
The Greenbrier Clinic, Inc.	– White Sulphur Springs
United Hospital Center	– Clarksburg
Weirton Medical Center	– Weirton

COLA to increase fees September 1

The Commission on Office Laboratory Accreditation (COLA) has announced that it will raise its fees and institute a biennial fee schedule effective September 1.

COLA Chief Executive Officer J. Stephen Kroger, M.D., stated that the commission must charge higher fees to offset the costs of laboratory inspections mandated by CLIA 88. COLA will now be required to perform on-site inspections of all accredited laboratories every two years instead of the more cost-effective inspection schedule it has used in the past.

Despite the increase, however, COLA's new fee schedule is still lower for most office laboratories than the cost of federal certification by HCFA, yet it offers numerous educational benefits not included in the federal program. These benefits include a self-assessment questionnaire in which the laboratory can evaluate its compliance with COLA standards prior to inspection, using the same questions and criteria as the COLA surveyor; educational guides targeted specifically to the office laboratory, and periodic updates on regulations affecting the physician's laboratory.

Dr. Kroger said that the commission is awaiting the release of final regulations for accrediting organizations from the Health Care Financing Administration (HCFA) and hopes to have its program approved by HCFA prior to the implementation of CLIA 88. He added that COLA will stop accepting new applications when it reaches capacity due to the organization's commitment to quality and service. For this reason, he is encouraging physicians to enroll their laboratories in COLA now to avoid the possibility of a delay in being accepted into the program.

Founded in 1988, COLA is a non-profit, educational, and accrediting organization for physicians' office laboratories sponsored by the American Academy of Family Physicians, the American Medical Association, the American Society of Internal Medicine, and the College of American Pathologists. It accredits laboratories throughout the United States and its territories.

San Diego site for Pain Society meeting

The American Pain Society (APS) will hold its 11th Annual Scientific Meeting, October 22-25, in San Diego. More than 2,000 pain specialists from around the world are expected to attend.

This meeting is designed to promote interdisciplinary exchange among pain scientists and health care professionals from many different specialties. The program will consist of 35 concurrent sessions and symposia, six plenary sessions, eight breakfast sessions, a luncheon session on the topic of "Credentialing in Pain Medicine" and a poster program featuring more than 300 posters. In addition, the educational program features exhibits by pharmaceutical and product companies from around the country.

On October 22, APS presents its annual Pain Update Program. This program consists of eight in-depth sessions designed specifically for the acquisition of clinical skills in the latest diagnostic and treatment modalities for the management of pain. These sessions are targeted at physicians, psychologists, dentists, nurses, physical therapists, occupational therapists, social workers, health care administrators, and others interested in pain management.

For further information on the Pain Update Sessions and the APS Annual Scientific Meeting, contact The American Pain Society at 5700 Old Orchard Road, Skokie, IL 60077-1057 or (708) 966-5595.

Arthrocentesis conference available on videotape

The University of Washington School of Medicine has made available the videotape version of "Arthrocentesis and Injection Techniques For the Primary Care Physician," a national conference presented in Seattle by leading physicians in the field.

This home study course is approved for 2.5 CME Category I credits of the Physician's Recognition Award of the American Medical Association. The lectures, as well as anatomy and cadaver demonstrations, are designed for family physicians, gerontologists, rheumatologists and other physicians involved in the treatment of arthritis and joint disorders. This video program provides didactic material followed by hands-on training in joint aspiration and injection as well as injection of selected bursae, tendon sheath and other soft tissue.

Topics given special coverage during this 2.5-hour home study course include: Anatomy of Synovial Spaces; Indications for Arthrocentesis and Injection Therapy and Synovial Fluid Analysis; and Arthrocentesis/ Injection Techniques and Complications.

For more information about course, phone 1-800-284-8433.

WVU ophthalmology conference set

The West Virginia University Department of Ophthalmology's 13th Annual Clinical Ophthalmology Conference has been scheduled for September 25-26 at Lakeview Resort and Conference Center in Morgantown.

This year's meeting will feature B. Thomas Hutchinson, M.D., discussing "Glaucoma;" Kirk H. Packo, M.D., lecturing on "Retina and Vitreous Disease;" and Edwin M. Stone, M.D., Ph.D., speaking on "Ophthalmic Genetics."

In addition to these three presentations, a course for ophthalmic technicians entitled "Fundamentals of Ophthalmic Photography: Fundus Photography and Fluorescein Angiography" will be held on Friday, September 25. This course has been approved for eight hours of JCAHPO credit and eight hours of OPS credit. An AAO ophthalmology coding seminar offering CEU credits will also be conducted in association with the meeting.

For more details, call Patricia Schumann at 293-3757.

The Stage Is Set!

The West Virginia State Medical Association's 125th Annual Meeting

August 19 - 22, 1992
The Greenbrier
White Sulphur Springs, West Virginia

Please be sure to make hotel reservations in advance by calling **1-800-624-6070.** The State Fair is the same week and the hotel fills up quickly. For information about other area hotels, call the WVSMA at (304) 925-0342.

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Physician Non-members - $175.00 Students, Residents & Nurses - No Charge
Auxiliary Ballroom Dance Lessons - $25 per couple, Thurs., Aug. 20
Black Tie Formal Dance & Fashion Show - $50 per couple, Fri., Aug. 21

Enclosed is a check for $ _____
I will be attending the _____ dance lessons _____ formal dance/fashion show

Please send registration form and check to:
WVSMA
P.O. Box 4106
Charleston, WV 25364

Continuing Medical Education

Listed on this page are some of the upcoming CME programs which will be held in the state.

The programs this month were compiled by: Patricia Barnhart, WVSMA loss control coordinator; Robin Rector, coordinator for CME for Charleston Area Medical Center; and Kari Long, program director of CME and rural services for WVU.

Futher details about these CME activities may be obtained by calling Barnhart at 925-0342; Rector at 348-9580; and Long at 293-3937.

If you would like to have the CME programs offered by your institution or association for physicians published in the *Journal,* please contact Nancy Hill, managing editor, at 925-0342.

West Virginia State Medical Association - Charleston

August 19-22 - "WVSMA 125th Annual Meeting," The Greenbrier, White Sulphur Springs

CAMC/WVU Health Sciences Center - Charleston

August 10 -"The Experience of Loss: Caring for the Family with a Critically Ill Child," (teleconference), 12:30 p.m. - 1:30 p.m., WVU Health Sciences Center, Room 2014

August 10 -"Healing Applications of Mental Imagery," (teleconference), CAMC Family Resource Center

Outreach Programs

Key to Sponsors

★ *WVU Health Sciences Center, Morgantown*

☐ *CAMC/WVU Health Sciences Center, Charleston*

Fairmont ★ Fairmont General Hospital, August 4, "Update on Rheumatic Fever," Melanie Fisher, M.D.

White Sulphur Springs ★ The Greenbrier Clinic, July 27, "Screening for Glaucoma," Joseph Feghali, M.D.

Martinsburg ★ VA Medical Center, August 6, "Office Dermatology," William Welton, M.D.

Man ☐ Man Appalachian Regional Hospital, August 18, 7 p.m., "Pediatric Surgical Problems," Eduardo Suson, M.D.

Montgomery ☐ Montgomery General Hospital, August 5, 12:30 p.m., "Abdominal Aortic Aneurysms," Ali AbuRahma, M.D.

Ripley ☐ Jackson General Hospital, August 14, noon, TBA

Spencer ☐ Roane General Hospital, August 18, 12:30 p.m., "Chronic Sinusitis," Romeo Lim, M.D.

Electromyography and Nerve Conduction Studies.

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Diplomate of American Board of Physical Medicine and Rehabilitation.

Diplomate of The American Board of Electro-Diagnostic Medicine

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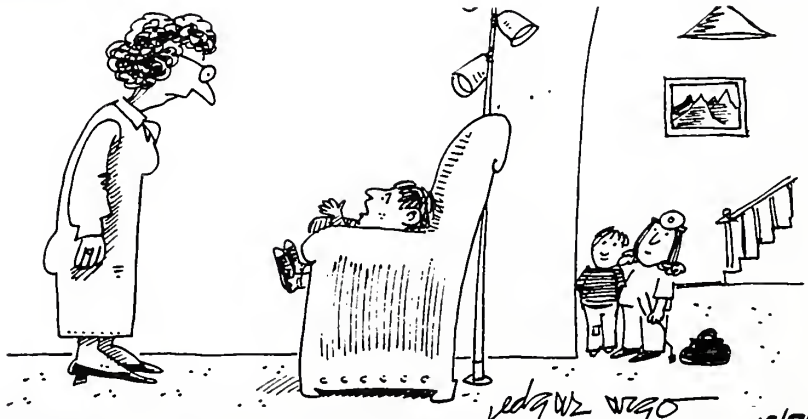
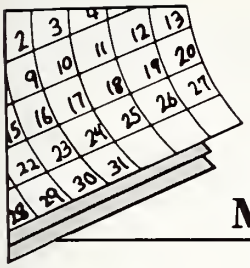


"I KNOW I'VE BEEN SITTING HERE ALL MORNING... WE'RE PLAYING DOCTOR AND I'M IN THE WAITING ROOM."



Medical Meetings

August

1-3—Financial Management Conference for Physicians and Dentists, Medical College of Georgia (sponsor), Hilton Head Island, S.C.
2-6—35th Pediatric Program, Aspen, Colo.
5-7—9th Annual Meeting of the Southern Orthopaedic Association, Whistler, British Columbia
5-9—American In Vitro Allergy/Immunology Society, Jackson Hole, Wyo.
13-15—5th Annual Meeting of the Southern Association for Oncology, Hilton Head Island, S.C.
15-21—6th Annual Comprehensive Review in Internal Medicine, Ohio State University, Columbus
19-22—WVSMA 125th Annual Meeting, White Sulphur Springs
28-29—Third Annual Hearing Impaired Conference, West Virginia Hospital Research and Education Foundation, Inc. (sponsor), Charleston

September

3—Surviving Physician Payment Reform, WVSMA (sponsor), Wheeling
9-12—Challenges and Controversies in Cancer Research, Ohio State University, Columbus
10-12—American Gynecological and Obstetrical Society, Hot Springs, Va.
11—Successful Money Management for Mid-Career Physicians, AMA (sponsor), Baltimore
12—Financial Strategies for Successful Retirement for Mid-Career Physicians, AMA (sponsor), Baltimore
12—Advanced Trauma Life Support™ Abbreviated Instructor Course, District of Columbia Committee on Trauma of the ACS and the Georgetown University Medical Center Office of CME (sponsors), Washington, D.C.
13-17—American Academy of Otolaryngology - Head and Neck Surgery, Washington, D.C.
13-18—MRI One-Week Fellowship, MRI Education Foundation, Cincinnati
18—The Emerging Role of Colony Stimulating Factors in Clinical Oncology, Georgetown University Medical Center, Washington, D.C.
20-21—Introductory Perimetry Course, Ohio State University Department of Ophthalmology and the Ohio State University Center for Continuing Medical Education (sponsors), Columbus
25-26—The New Anti-Hypertensive Regimes, Ohio State University, Columbus

For More Information . . .

Contact the Journal at (304) 925-0342 for additional information about most of the above meetings.

Poetry Corner

Life Goes On

So much to learn, so much to do
Yet, it seems, so little time to spend,
But somehow you seem to get it done;
And life goes on!

You are tired; there's no time to renew.
Yesterday, today, tomorrow blend,
As you seem to do it on the run;
Yet life goes on!

Some days you feel depressed and blue
And wish the struggle soon would end;
You feel there's little time for fun;
But life goes on!

Somehow you see your duty through,
Somehow your broken fences mend,
Somehow you stand the scorching sun;
And life goes on!

Then, if you to your God are true
And those less fortunate befriend,
You know you are the lucky one;
As life goes on!

E. Leon Linger, M.D.

Please address your submissions for Poetry Corner to: Stephen D. Ward, M.D., Editor, West Virginia Medical Journal, Box 4106, Charleston, WV 25364.

Bureau of Public Health News

This page of material is submitted and paid for by the Bureau of Public Health.

Health commissioner honored by New Hampshire PHA

West Virginia Bureau of Public Health Commissioner William T. Wallace Jr., M.D., M.P.H., was recently awarded the certificate of Lifetime Honorary Membership by the New Hampshire Public Health Association for his dedicated service to the people of New Hampshire.

During his 14 years with the New Hampshire Department of Health and Welfare, Dr. Wallace served in several capacities, including director of the Bureau of Crippled Children's Services and deputy health officer for the Division of Public Health. He served as the state director of Public Health Services from August 1981 until October 1990, when he was named state health commissioner for West Virginia.

Johns Hopkins resident to assist with adolescent health plan

Laura Robin, D.O., a student at the Johns Hopkins University School of Hygiene and Public Health, will be working on some special projects in the Office of Maternal and Child Health Services during the next six months.

Dr. Robin, who is a resident in the school's Maternal and Child Health Department, will be working in the Division of Children's Services through December 15. She'll be interacting with a broad-based group to develop a plan to place special emphasis upon the health of adolescents in the state's maternal and child health program. She has previously worked as a general medical officer at the U.S. Public Health Service's Indian Health Center in Kayenta, Ariz.

For more information about Children's Services programs, contact Dr. Mary Skinner at 558-5388.

Report provides new statistics about diabetes mellitus

According to a report from the National Center for Health Statistics, diabetes mellitus is second only to essential hypertension as the most frequently reported principal diagnosis for people ages 45 to 74 during all visits to office-based physicians in the United States.

This report of 1989 figures looks at several interesting facts regarding diabetes mellitus as a principal diagnosis during office visits. Forty-four percent of all office visits were made to general and family practice physicians, while 28.7 percent were made to internal medicine specialists.

Other statistics from the report show that 44.4 percent of all diabetes mellitus visits listed Medicare as the expected source of payment, followed by self-pay (33.5 percent), commercial insurance (21.2 percent), HMO/prepaid (13.9 percent) and Medicaid (8.9 percent).

Diagnostic services such as blood pressure measurement, "other" blood tests, urinalysis and cholesterol measurement were all performed significantly more often during visits when diabetes mellitus was the principal diagnosis, compared to all other visits.

About 30.3 percent of all visits included three or more medications, compared with just 10.9 percent of visits with diabetes mellitus as the principal diagnosis. The report also showed that the mean duration of physician-patient contact was 17.3 minutes for visits when diabetes was the principal diagnosis.

For more information on the report or the WV Diabetes Program, contact Helen Rentch at 558-0644.

Promotional materials on breastfeeding offered

According to the U.S. Surgeon General, every appropriate health care provider should be promoting breastfeeding as the standard and normal method of infant feeding. Breastfeeding has proven long-lasting health and emotional benefits for infants and children.

During the next few months, breastfeeding coordinators for the West Virginia WIC program will be contacting obstetrical and pediatric physicians and hospital staff members to offer up-to-date resources for breastfeeding promotion and successful management. Printed materials, videos offering in-service education for medical staff, and 12-minute videos for patient viewing for use in office or clinic lobbies are currently available to physicians, clinics and delivery hospitals.

For breastfeeding education resources or further information, contact Connie Neuner at 558-0030.

Bureau participates in disaster drill

Staff members from several offices within the Bureau of Public Health recently joined the state's Office of Emergency Services by taking part in a two-day disaster drill involving the Beaver Valley Power Station near Pittsburgh. The drill, which was graded by federal emergency officials, involved a radioactive release from the nuclear power plant.

Employees from the Bureau's Office of Environmental Health Services Radiological Health Program simulated tracking of the contaminated plume as it would have traveled down a portion of the Northern Panhandle through Hancock County. State health officials then joined other state agency representatives in determining such actions as evacuation, issuance of product and livestock advisories, and eventual re-entry and relocation of affected residents.

This is the first time West Virginia has participated in such as extensive exercise involving a nuclear disaster. There are no nuclear power plants within the state, but most of the four Northern Panhandle counties are within a 50-mile radius of the Beaver Valley plant.

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WEST VIRGINIA UNIVERSITY HEALTH SCIENCES CENTER

Compiled from material furnished by the West Virginia University Health Sciences Center, Communications Division, Morgantown.

Frick named chair of Radiology Department

Dr. Mathis P. Frick has been named chair of the Department of Radiology in the WVU School of Medicine.

Dr. Frick is currently professor and chair of the Department of Radiology at Creighton University in Omaha, Neb. He attended medical school at the University of Zurich in Switzerland and served a residency in radiology at University of Minnesota Hospitals.

While at the University of Minnesota, Dr. Frick served a fellowship in the Division of Nuclear Medicine in the Department of Radiology and was later named associate professor in the department.

Dr. Frick is certified by the American Board of Radiology and the American Board of Nuclear Medicine. He co-authored the book "Abdominal Imaging: An Introduction," and he has published numerous articles, abstracts, and book chapters.

Cardiologists clear arteries with new laser

A team of WVU cardiologists have performed the first surgery in the state involving a new technology which uses bursts of laser light from the Eclipse Laser System to clear the blocked arteries of a patient. This surgery was conducted May 19 and may help hundreds of others avoid heart bypass surgery in the future.

Approximately 15 hospitals have now been approved to use the Eclipse Laser System to vaporize lesions which develop in the inner walls of the arteries and constrict the flow of blood. Although other laser atherectomy machines are in use in West Virginia, this procedure was the first application of the Eclipse system.

The procedure was performed by Dr. Abnash Jain, head of the section of cardiology, along with Dr. Sam Congello and Dr. Mark Borsch.

WVU to participate in national breast cancer study

At least 50 women who are considered to be at increased risk for breast cancer will be able to participate in a nationwide study of the ability of the drug tamoxifen to prevent breast cancer, which will be conducted at the Mary Babb Randolph Cancer Center.

Tamoxifen, a widely used drug in treatment of advanced breast cancer, is not currently available as a preventive therapy. The new study, funded by a $60 million grant from the National Cancer Institute, will involve 16,000 women, ages 35 and older, at 270 sites across the United States. Researchers hope the project will enable them to develop a method to prevent breast cancer.

At the Mary Babb Randolph Cancer Center, researchers will recruit 50 or more women for the project. Each participant will be asked to take a pill daily for five years. Half of the women will be given tamoxifen, and half a placebo. It is a double-blind study.

Hill receives ACPE award for procedure

Hill

Dr. Ronald C. Hill, associate professor of surgery, has been recognized by the National Awards Program of the American College of Physician Executives (ACPE).

Dr. Hill's entry in the ACPE National Awards Program, "New Technique Found for Bypass Pump," was cited as "an innovation and a significant advance in medical management." In his entry, Dr. Hill explains the rew arming of a hypothermia victim at WVUH. The entry will be included in Innovation '92, a book published by the organization.

Announcement of Dr. Hill's honor was made at the national awards program presentation at ACPE's national conference, May 6-9, in San Francisco. ACPE is a national professional association of physicians in leadership and management positions throughout the health care industry.

Two professors aid animal research

Hedge

Two HSC faculty members traveled to Washington, D.C., June 10, as part of the "Saving Lives Coalition," to speak out about the important role animal research plays in saving lives.

Dr. George Hedge, associate dean of research and graduate studies, and Dr. Anthony DiBartolomeo, associate dean of clinical affairs, traveled to Washington with Patricia Meinhart, a patient of Dr. DiBartolomeo's, and Ed McCabe, president of the West Virginia chapter of the Incurably Ill for Animal Research.

During the day, participants visited with legislators, including Senator Robert C. Byrd and Congressman Alan Mollohan, to educate them regarding the value of animal research. After the visits, participants joined Secretary of Health and Human Services Dr. Louis Sullivan for a celebration.

Chillag named distinguished teacher

Dr. Shawn A. Chillag, professor and chair of medicine at the Charleston Division, was recently honored as the School of Medicine's Distinguished Teacher at the school's annual senior banquet.

The Distinguished Teacher Award recognizes a faculty member who brings continual teaching excellence to the School of Medicine. Dr. Chillag, who recently served as interim vice president for health sciences, was

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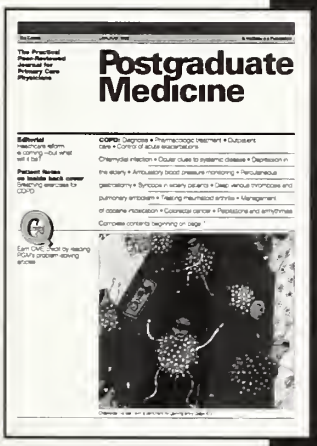

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AMERICAN MEDICAL WRITERS ASSOCIATION

Marshall University School of Medicine

Compiled from material furnished by the Office of University Relations, Marshall University, Huntington.

Study examining hormones' role in breast cancer

A new $381,000 grant by the National Cancer Institute is enabling Dr. Michael R. Moore, professor and interim chairman of biochemistry at Marshall, to study how hormones spur the growth of certain breast cancers.

Dr. Moore's study seeks to show how progesterone increases the growth of certain breast cancers. The project will look at the c-myc protooncogene, which is involved in the growth of normal and cancer cells. The research will show how progesterone stimulates the activity of this gene.

"There are many well-studied effects of estrogen on breast cancer, and this project offers an exciting new opportunity to explore the effects of progesterone," Dr. Moore said. "In 1987, I reported that progestins can stimulate breast cancer growth. At that time, scientists widely believed that progestins inhibited breast cancer growth. We at Marshall were the first to show that the growth of breast cancer cells was being stimulated by progestins alone," he added.

The current project's findings could ultimately have implications for breast cancer treatment for the one in nine women who will develop breast cancer in their lifetimes. In West Virginia, more than 300 women died from the disease in 1990.

"It has been known for many years that estrogen stimulates growth of some breast cancer cells, so one routine treatment for many patients is anti-estrogen medication," Dr. Moore said. "This is not always completely effective, and we at Marshall have proposed that adding anti-progestins to the medication might help patients more. In fact, a recent French study showed that anti-progestins do inhibit tumor growth when used alone, and another European study is testing them in combination with anti-estrogen medication.

Some of the experiments in this project will tap new research capabilities brought to Marshall University through EPSCoR, the Experimental Program to Stimulate Competitive Research. EPSCoR is a multimillion dollar program offered by the National Science Foundation and matched with state funds. Through this program, certain reagents which would have had to be made in other laboratories can now be made at Marshall. EPSCoR has also enabled Marshall to install state-of-the-art research equipment, increase faculty expertise in molecular biology techniques, and add two faculty members and several graduate students.

MU honored for high rate of graduates entering FP residencies

The Marshall University School of Medicine is one of four medical schools honored this year for the high percentage of its graduates entering careers in family practice.

The American Academy of Family Physicians presented the Family Practice Department Achievement Award, bronze level, to Marshall's Department of Family and Community Health during the annual meeting of the Society of Teachers of Family Medicine held in St. Louis, Mo.

Of the four schools recognized, each averaged more than 20 percent of their graduates entering family practice residencies between 1989 and 1991. Marshall's average of 24.4 percent earned it a bronze award. Silver awards, for averages above 25 but less than 30 percent, went to Mercer University, the University of North Dakota and Wright State University. No school earned the gold award, given to schools with three-year averages above 30 percent.

Marshall ranked second nationwide in 1991 for the percentage of graduates entering family practice residencies.

MU to offer state's first fellowship in field of geriatrics

The Marshall University School of Medicine has been approved to offer West Virginia's first medical fellowship in the field of geriatrics.

The Accreditation Council for Graduate Medical Education has approved the two-year training program, which will be offered through the Department of Internal Medicine. Dr. Maurice Mufson, chairman of medicine, said the fellowship will provide a comprehensive approach to caring for elderly people, who make up more than a quarter of the nation's population.

"The program will teach physicians how to care for and treat elderly patients, as well to deal with their needs in terms of the activities of daily living, occupational therapy recommendations, and rehabilitation needs," Dr. Mufson said. "The two fellows will receive training in many settings, from Marshall's Hanshaw Geriatric Center and hospitals to nursing homes and intermediate care facilities," he added.

According to Dr. Mufson, geriatrics fellowships are a relative newcomer to the medical education process and the first programs were approved only within the past two years or so.

Devereaux to serve on national task force for depressive disorders

Elizabeth B. Devereaux, an associate professor of psychiatry in the Marshall School of Medicine, has been chosen to serve on the Depressive Disorders Task Force of the Joint Commission on Accreditation of Healthcare Organizations.

Devereaux will help develop ways for the commission to determine whether the organizations it visits are appropriately treating patients who have depressive disorders.

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Medical Student News

Editor's Note: *If you would like to contribute an article for this page, please contact Nancy Hill, managing editor, at 925-0342.*

AMA Annual Meeting provides insight into national student section

Dear WVSMA-MSS Members:

I had the unique opportunity to attend the Annual Meeting of the American Medical Association which took place in Chicago on June 18-25. The Medical Student Section of the AMA is a very active and impressive organization of medical students from all 50 states, whose diversity of experiences and concerns are directed toward influencing medicine and medical education in a positive manner. This type of participation with fellow students should be viewed as part of our overall educational process, for it addresses the larger issue of how we, as future physicians, will interact to guide the inevitable changes to come.

The issues discussed among the students included student loan repayment, HIV/comprehensive medical insurance for medical students, safety, education, and curriculum reform. Many of the resolutions on these topics, written by medical students, ultimately become part of AMA policy and directly affect medical education and practice. These issues, however, are not the sole propriety of the AMA, but represent universal concerns about the profession, health care delivery, and the country.

Many student organizations exist, and emphasis should not be placed on joining one group versus another. Rather, emphasis needs to be directed at the importance of interacting with our peers and colleagues to ensure that progress is made in a positive direction -- not in a haphazard, reactionary manner that tough economic and political forces impose.

In his address to the WVSMA House of Delegates at the 1991 Annual Meeting, Dr. John Tew stated that "Leadership is not 'What do I want and how do I get it,' but 'what do I possess and how do I give it.'"

Leadership begins with the individual, and as medical students, each one of us possesses the capacity for leadership through involvement that will make **positive** change inevitable.

Kevin Kaufman, MSIII
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Obituary

Leonard E. Yurko, M.D.

Leonard E. Yurko, M.D., of Weirton, died April 13 in Weirton Medical Center. He was 74.

A native of McKeesport, Pa., Dr. Yurko graduated from West Virginia University and received his medical degree from the University of Maryland in 1943. He served in the Army Medical Corps during World War II and then opened his office in Weirton for general practice in 1946.

In 1952, Dr. Yurko began an orthopedic residency at Ohio State University Hospital and upon completion of his residency, he returned to Weirton to specialize in orthopedic surgery until his retirement in 1984. Dr. Yurko was on staff at Weirton Medical Center, Ohio Valley Hospital and St. John's Hospital.

A WVSMA member since 1947, Dr. Yurko was also a member of the Hancock County Medical Society and the American Medical Association. In addition, he held a fellowship in the International College of Surgeons, and membership in the medical fraternities Phi Beta Pi and Theta Kappa Psi.

Surviving are his wife, Charlotte Manion Yurko; two sons, Paul Yurko of Bowie, Md., and James Yurko of Crofton, Md.; two daughters, Mrs. John (Michael) Glover of Grosselle, Mich., and Mrs. James (Letha E.) Griffon of Atlanta; a brother, Dr. Anthony A. Yurko Sr. of Tryon, N.C.; and nine grandchildren.

County Societies

Monongalia

Prior to their May meeting, the council members met and voted unanimously to contribute $500 to partially subsidize the Spina Bifida Camp.

The society's regular meeting was then held and Dr. Mario Battigelli, chairman of the Institute of Occupational Safety and Health at the WVU Health Sciences Center, was the featured speaker. He discussed recent guidelines for low back examination.

Following Dr. Battigelli's presentation, members discussed the need for additional delegates for the WVSMA's Annual Meeting.

On June 23, the society held their meeting at the Fairmont Field Club in conjunction with the Harrison and Marion County Medical Societies. This annual tri-county meeting was devoted to the subject of "Health Care Financing" and featured three speakers who represented the viewpoints of the AMA, Senator Jay Rockefeller and Physicians for a National Health Program.

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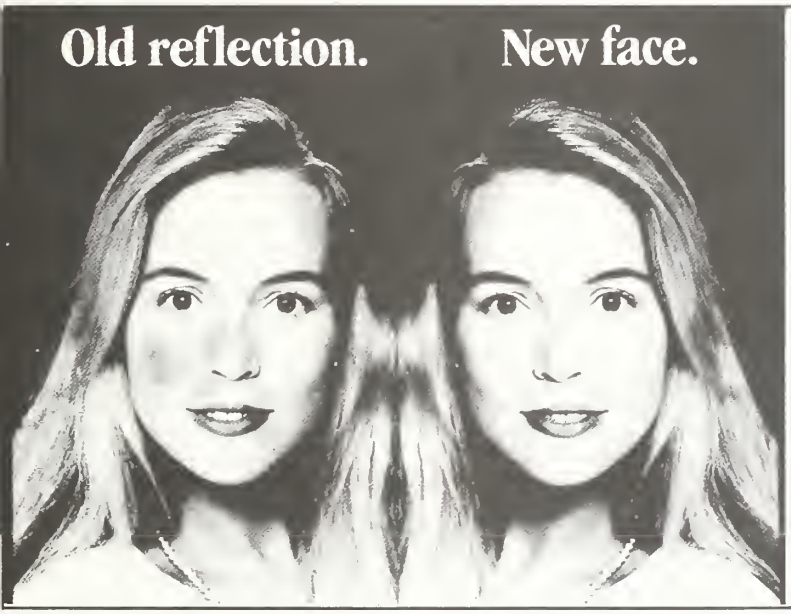

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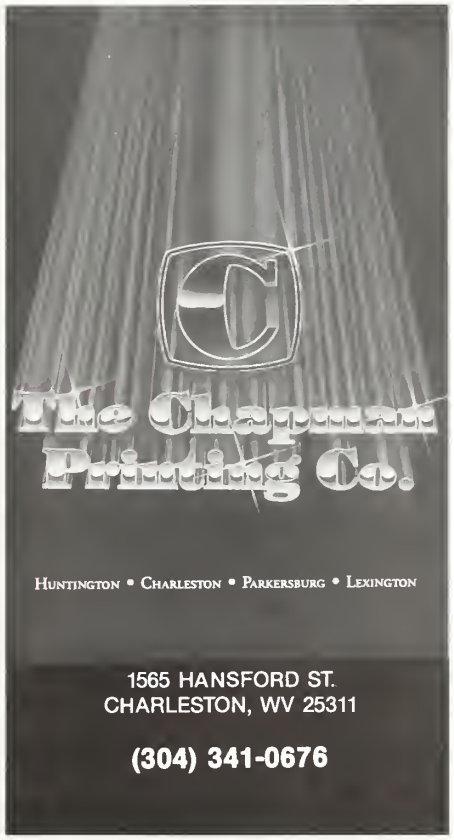

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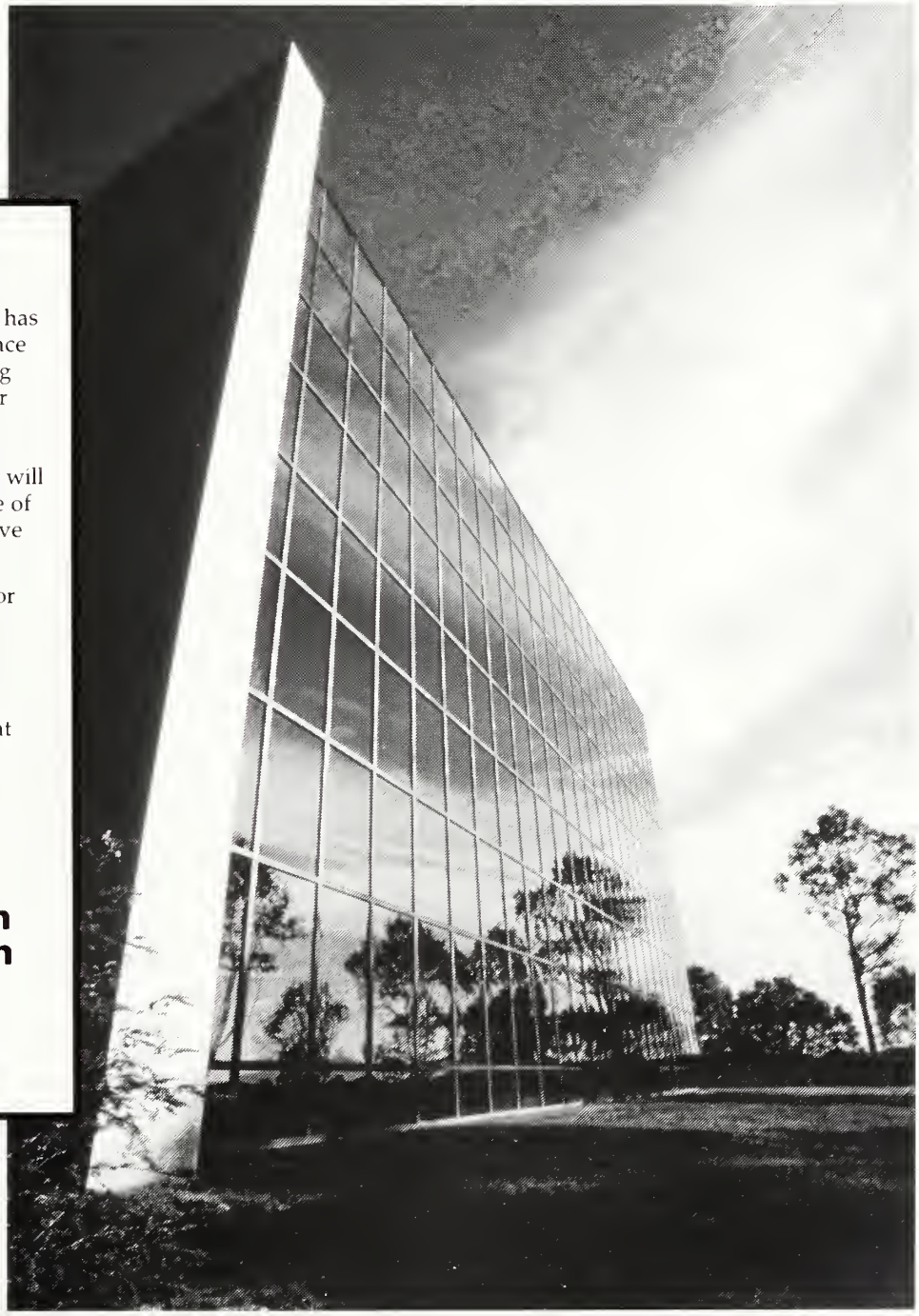

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References: 1. Data on file, Searle. 2. Edmonds D, Würth JP, Baumgart P, et al. Twenty-four-hour monitoring of blood pressure during calcium antagonist therapy. In: Fleckenstein A, Laragh SH, eds. *Hypertension—the Next Decade: Verapamil In Focus.* New York, NY: Churchill Livingstone; 1987:94-100. 3. Midtbø KA. Effects of long-term verapamil therapy on serum lipids and other metabolic parameters. *Am J Cardiol.* 1990;66:131-151. 4. Fagher B, Henningsen N, Hulthén L, et al. Antihypertensive and renal effects of enalapril and slow-release verapamil in essential hypertension. *Eur J Clin Pharmacol.* 1990;39(suppl 1):S41-S43. 5. Schmieder RE, Messerli FH, Garavaglia GE, et al. Cardiovascular effects of verapamil in patients with essential hypertension. *Circulation.* 1987;75:1030-1036. 6. Midtbø K, Lauve O, Hals O. No metabolic side effects of long-term treatment with verapamil in hypertension. *Angiology.* 1988;39:1025-1029.

BRIEF SUMMARY

Contraindications: Severe LV dysfunction (see *Warnings*), hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no pacemaker is present), 2nd- or 3rd-degree AV block (if no pacemaker is present), atrial flutter/fibrillation with an accessory bypass tract (eg, WPW or LGL syndromes), hypersensitivity to verapamil.

Warnings: Verapamil should be avoided in patients with severe LV dysfunction (eg, ejection fraction < 30%) or moderate to severe symptoms of cardiac failure and in patients with any degree of ventricular dysfunction if they are receiving a beta-blocker. Control milder heart failure with optimum digitalization and/or diuretics before Calan SR is used. Verapamil may occasionally produce hypotension. Elevations of liver enzymes have been reported. Several cases have been demonstrated to be produced by verapamil. Periodic monitoring of liver function in patients on verapamil is prudent. Some patients with paroxysmal and/or chronic atrial flutter/fibrillation and an accessory AV pathway (eg, WPW or LGL syndromes) have developed an increased antegrade conduction across the accessory pathway bypassing the AV node, producing a very rapid ventricular response or ventricular fibrillation after receiving I.V. verapamil (or digitalis). Because of this risk, oral verapamil is contraindicated in such patients. AV block may occur (2nd- and 3rd-degree, 0.8%). Development of marked 1st-degree block or progression to 2nd- or 3rd-degree block requires reduction in dosage or, rarely, discontinuation and institution of appropriate therapy. Sinus bradycardia, 2nd-degree AV block, sinus arrest, pulmonary edema and/or severe hypotension were seen in some critically ill patients with hypertrophic cardiomyopathy who were treated with verapamil.

Precautions: Verapamil should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdosage. Verapamil may decrease neuromuscular transmission in patients with Duchenne's muscular dystrophy and may prolong recovery from the neuromuscular blocking agent vecuronium. It may be necessary to decrease verapamil dosage in patients with attenuated neuromuscular transmission. Combined therapy with beta-adrenergic blockers and verapamil may result in additive negative effects on heart rate, atrioventricular conduction and/or cardiac contractility; there have been reports of excessive bradycardia and AV block, including complete heart block. The risks of such combined therapy may outweigh the benefits. The combination should be used only with caution and close monitoring. Decreased metoprolol and propranolol clearance may occur when either drug is administered concomitantly with verapamil. A variable effect has been seen with combined use of atenolol. Chronic verapamil treatment can increase serum digoxin levels by 50% to 75% during the first week of therapy, which can result in digitalis toxicity. In patients with hepatic cirrhosis, verapamil may reduce total body clearance and extrarenal clearance of digitoxin. The digoxin dose should be reduced when verapamil is given, and the patient carefully monitored. Verapamil will usually have an additive effect in patients receiving blood-pressure-lowering agents. Disopyramide should not be given within 48 hours before or 24 hours after verapamil administration. Concomitant use of flecainide and verapamil may have additive effects on myocardial contractility, AV conduction, and repolarization. Combined verapamil and quinidine therapy in patients with hypertrophic cardiomyopathy should be avoided, since significant hypotension may result. Concomitant use of lithium and verapamil may result in a lowering of serum lithium levels or increased sensitivity to lithium. Patients receiving both drugs must be monitored carefully. Verapamil may increase carbamazepine concentrations during combined use. Rifampin may reduce verapamil bioavailability. Phenobarbital may increase verapamil clearance. Verapamil may increase serum levels of cyclosporin. Verapamil may inhibit the clearance and increase the plasma levels of theophylline. Concomitant use of inhalation anesthetics and calcium antagonists needs careful titration to avoid excessive cardiovascular depression. Verapamil may potentiate the activity of neuromuscular blocking agents (curare-like and depolarizing); dosage reduction may be required. There was no evidence of a carcinogenic potential of verapamil administered to rats for 2 years. A study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. Pregnancy Category C. There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. Verapamil is excreted in breast milk; therefore, nursing should be discontinued during verapamil use.

Adverse Reactions: Constipation (7.3%), dizziness (3.3%), nausea (2.7%), hypotension (2.5%), headache (2.2%), edema (1.9%), CHF, pulmonary edema (1.8%), fatigue (1.7%), dyspnea (1.4%), bradycardia: HR < 50/min (1.4%), AV block: total 1°,2°,3° (1.2%), 2° and 3° (0.8%), rash (1.2%), flushing (0.6%), elevated liver enzymes, reversible non-obstructive paralytic ileus. The following reactions, reported in 1.0% or less of patients, occurred under conditions where a causal relationship is uncertain: angina pectoris, atrioventricular dissociation, chest pain, claudication, myocardial infarction, palpitations, purpura (vasculitis), syncope, diarrhea, dry mouth, gastrointestinal distress, gingival hyperplasia, ecchymosis or bruising, cerebrovascular accident, confusion, equilibrium disorders, insomnia, muscle cramps, paresthesia, psychotic symptoms, shakiness, somnolence, arthralgia and rash, exanthema, hair loss, hyperkeratosis, macules, sweating, urticaria, Stevens-Johnson syndrome, erythema multiforme, blurred vision, gynecomastia, galactorrhea/hyperprolactinemia, increased urination, spotty menstruation, impotence.

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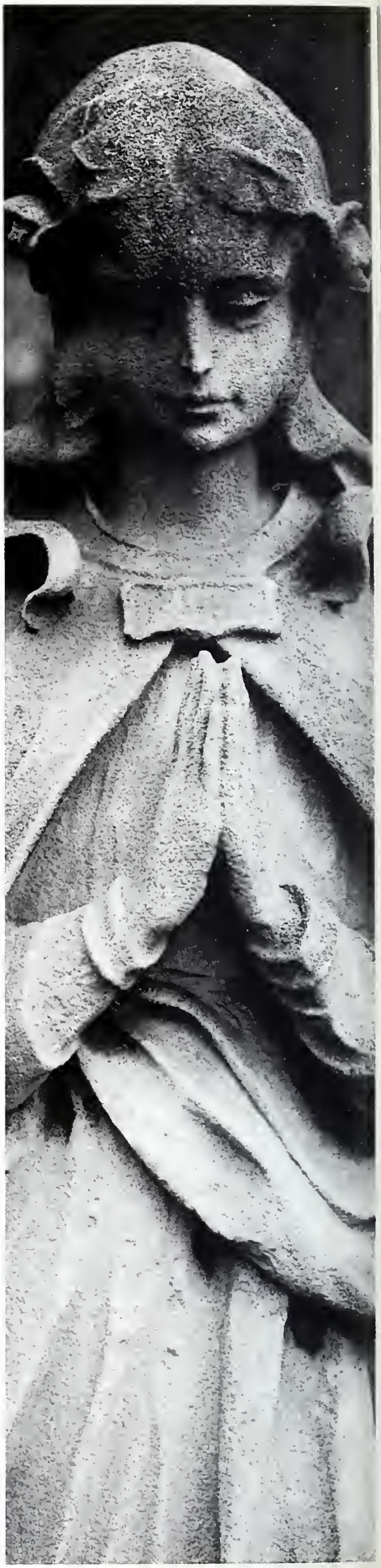

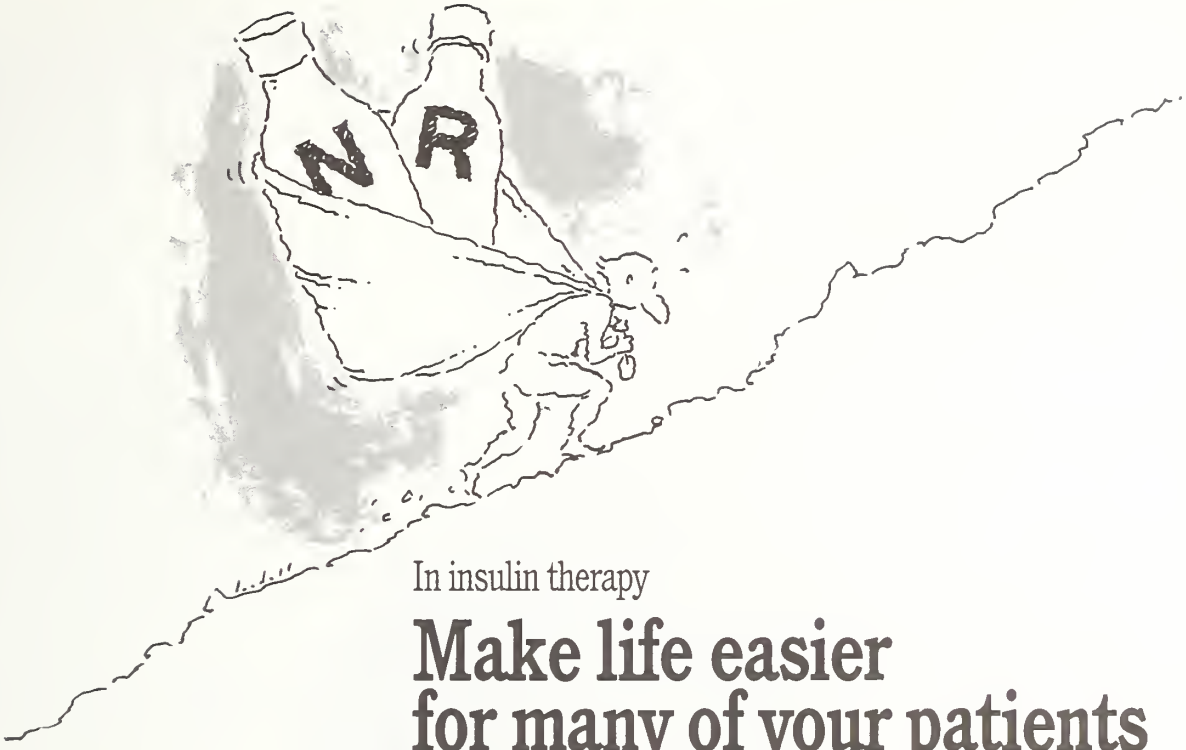

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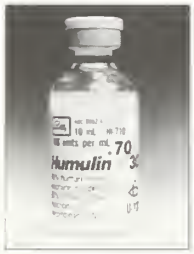

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Front Cover

The spectacular fireworks at the Sternwheel Regatta Festival light up the sky over Charleston. Photo courtesy of *David E. Fattaleh, West Virginia Division of Tourism and Parks.*

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Giant cell tumor of the small bones of the hands and feet: Metatarsal giant cell tumor

RICHARD K. CAVENDER, M.D.
WILLIAM G. SALE III, M.D.
West Virginia University Health Sciences Center, Charleston Division

Abstract

Giant cell tumors (GCTs) of the small bones of the hands and feet are very rare. The prevalence of hand involvement is 5.8 percent and of the feet is 3.6 percent. When GCTs occur in these locations, they appear to represent a distinctive more aggressive form of tumor. They occur more often in a younger patient population, are more commonly multifocal, and are associated with higher risks for local recurrence and pulmonary metastasis. This article presents a rare case of GCT of the metatarsal bone and discusses the presentation, distinctive characteristics and treatment of this tumor when it occurs in these locations.

Introduction

Giant cell tumors (GCTs) rarely occur in the small bones of the hands and feet. As opposed to GCTs of the long bones, GCTs of the small bones of the hands and feet most commonly present as large soft tissue masses, with loss of function preceding the onset of pain.

Initial assessment often reveals involvement of the entire shaft of short tubular bones (1). Tumors localized to these regions are demonstrated in a younger patient population, are more commonly multifocal, and are associated with higher risks for local recurrence and pulmonary metastasis (2). Thus, it is suggested that GCTs occurring in these locations represent the most aggressive form of the tumor. Involvement of the foot is more uncommon than of the hand, with metatarsal involvement occurring in less than 1 percent of all cases (3). To date, as few as 13 cases of metatarsal GCT have been reported and the following report illustrates a rare occurence of this tumor (4).

Case report

On October 30, 1990, a 22-year-old white male presented to the Charleston Area Medical Center with swelling, erythema and pain of his right mid and forefoot. These symptoms had been present for approximately two weeks, following a twisting injury.

Physical examination revealed a neurovascularly intact right foot with extensive erythema, swelling and induration over the dorso-medial, mid and forefoot. Roentgenograms revealed a lytic, destructive lesion involving the entire first metatarsal, violating the cortex proximally (Figure 1). The remaining physical exam was unremarkable.

Medical workup revealed normal blood chemistry, CBC, and chest roentgenograms. MRI revealed a destructive, expansile lesion, involving the proximal 90 percent of the first metatarsal bone. The lesion extended beyond the cortex and infiltrated into the plantar surface of the foot, remaining within the confines of the MTP joint distally and the tarsometatarsal joint proximally (Figure 2). Incisional biopsy revealed a cavity filled with yellowish-tan

Figure 1. Anteroposterior roentgenogram of right foot from a 22-year-old, white male taken on 10/30/90, demonstrating a grossly lytic, expansile lesion with whole shaft involvement of the first metatarsal. Destruction of the cortex, soft tissue invasion and joint space extension is demonstrated.

Figure 2. MRI of right foot demonstrating soft tissue tumor involvement. The lesion extends beyond the cortex and infiltrates into the plantar surface of the foot, resulting in pressure effects on neighboring bone.

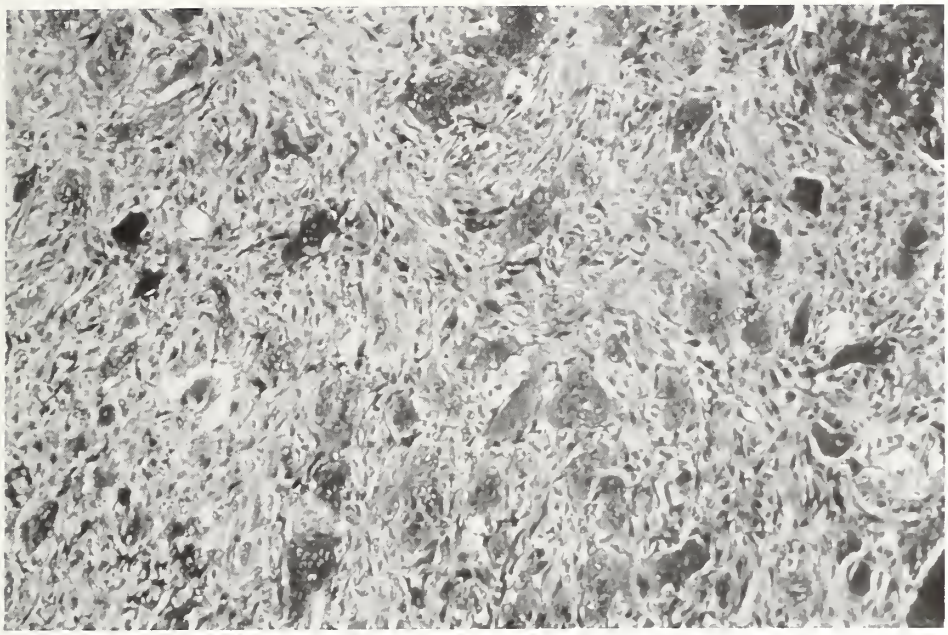

Figure 3. Histologic section of giant cell tumor revealing a monotonous pattern of multinucleated giant cells surrounded by and blending into a mononuclear spindled stroma.

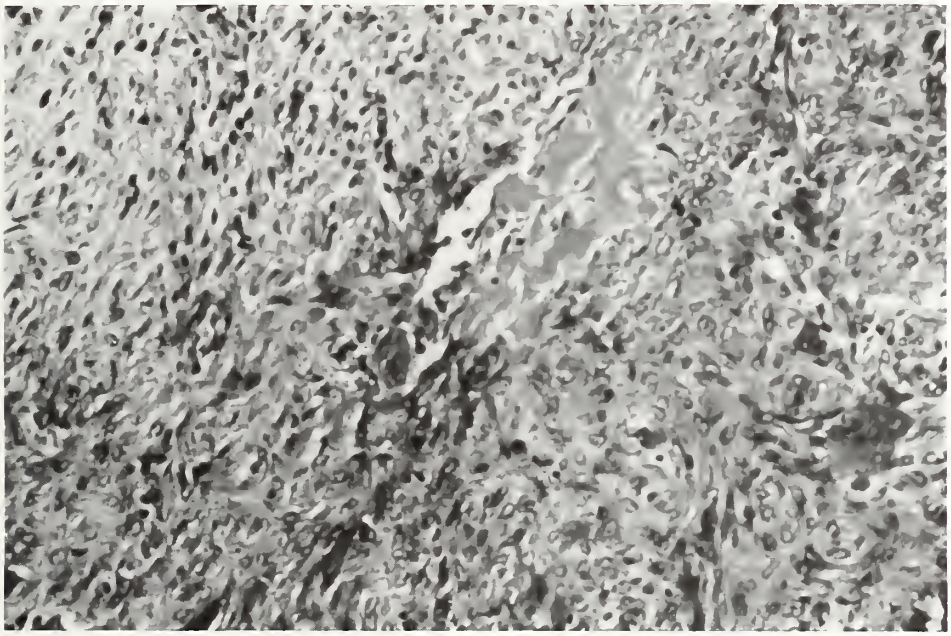

Figure 5. Histologic section of giant cell tumor revealing multinucleated giant cells interspersed within a spindled cellular stroma with rare small foci of neoplastic osteoid. Rare foci of neoplastic osteoid commonly present with GCT, however the diagnosis of osteosarcoma-giant cell variant must be excluded.

material. Little solid tumor was demonstrated. There was no remnant of the proximal 75 percent of the first metatarsal. The lytic cavity extended plantarward beneath the second metatarsal.

Pathologic sections revealed:

A) Extensive destruction of the cortical integrity with breakthrough from the marrow space into the adjacent soft tissue,

B) Pronounced subperiosteal reactive bone formation,

C) Extensive multifocal necrosis with large blood filled lakes within the tumor mass; and

D) A monotonous pattern of multinucleated giant cells surrounded by, and blending into, a spindle cellular pattern (Figure 3). Nuclei of the multinucleated giant cells and the spindle shaped, mononuclear cells were essentially similar, with a variable degree of mitotic activity (4-5 mitoses/10 HPF).

Figure 4. Anteroposterior roentgenogram of right foot from a 22-year-old white male taken 17 months prior to diagnosis of GCT, 5/26/89. Comparison with Figure 1 demonstrates the aggressiveness of the lesion.

Following the initial biopsy, roentgenograms of the patient's right foot which had been taken in May 1989 after a minor injury, were obtained for comparison. No retrospective pathology was demonstrated (Figure 4).

Based on the presumptive diagnosis of a locally aggressive GCT of the first metatarsal, local excision of the first metatarsal with an interpositional autogenous fibular graft was performed. Several pathologic sections of the original tissue revealed tumor cells forming osteoid (Figure 5), thus, the diagnosis of Osteosarcoma-Giant Cell Variant was debated. Subsequent pathological examination of soft tissue, from the en block excision, revealed typical GCT with extremely rare small foci of neoplastic osteoid.

Sixteen months after the operation, roentgenograms of the right foot reveal no evidence of local recurrence. Chest roentgenograms reveal no evidence of pulmonary metastasis. The fibular interposition autogenous graft was functioning quite nicely.

TABLE 1. Percentage distribution of 222 cases of GCT reported by Goldenberg et al (3)

Location	Percentage Distribution
Distal Femur	27%
Proximal Tibia	18%
Distal Radius	12%
Distal Ulna	6%
Proximal Femur	6%
Sacrum	5%
Proximal Fibula	4%
Distal Tibia	4%
Phalanges (carpal)	2.7%
Ilium	2.7%
Proximal Humerus	2.2%
Metacarpals	2.2%
Phalanges (tarsal)	1.8%
Distal Humerus	1.8%
Cranium	1.3%
Proximal Radius	1.3%
Pubis	1.3%
Metatarsals	0.9%
Tarsals	0.9%
Carpals	0.9%
Lumbar Vertebrae	0.9%
Distal Fibula	0.5%
Ischium	0.5%
Coccyx	0.5%
Cervical Vertebrae	0.5%

Discussion

GCTs, although rare, represent the second most common primary benign tumor of bone (5). They constitute approximately 5 percent of all bone tumors and 21 percent of all benign tumors in Western countries (6).

These tumors are benign but locally aggressive neoplasms with a tendency for metastasis, local recurrence and sarcomatous transformation (7,8). Giant cell tumors are most commonly found in young, skeletally mature adults, between the ages of 20-40 years old. There is a slight female predominance. Typically, GCTs are almost always a monostotic process that occurs in the ends of long bones (6,9,10). Less than 2 percent have been reported in patients with open epiphyses (11). The most common sites of involvement are the distal femur and the proximal tibia which account for 50 percent of cases, and the distal radius which accounts for 15 percent of cases (6,11). The sacrum, distal tibia, proximal humerus, proximal femur, and proximal fibula are less frequent sites (6,11,12). GCTs must be distinguished from several other lesions including sarcoma, aneurysmal bone cyst, unicameral bone cyst, chondroblastoma, chondromyxoid fibroma, non-ossifying fibroma, enchondroma, giant cell reparative granuloma, brown tumor of hyperparathyroidism and less commonly pigmented villonodular synovitis (2,3,6,9,10,11,13,14).

TABLE 2. Ten distinctive characteristics of GCT small bone involvement

1. Occurrence in younger population
2. Higher incidence of multicentricity, local recurrence and pulmonary metatastases
3. Whole shaft involvement
4. Cortical destruction
5. Pressure effects on neighboring bone
6. Grossly lytic lesion
7. Soft tissue calcification
8. Disuse osteoporosis
9. Fine honeycombed appearance
10. Joint involvement

The literature clearly demonstrates the rarity of GCTs of the small bones of the hands and feet. Nine of 407 cases of GCTs from the Mayo Clinic demonstrated involvement of these bones, Campanacci and colleagues reported nine of 209 cases, the Swedish Cancer Registry revealed six of 75 cases, and Goldenberg and colleagues reported only 17 of 222 cases of GCTs with involvement of the small bones of the hands and feet (2). Involvement of the hands is reported to be more common than that of the feet. Of the 222 lesions reported by Goldenberg and colleagues (Table 1), 3.6 percent occurred in the bones of the feet, and 5.8 percent occurred in the hand (3). Furthermore, the tarsal and metatarsal bones each revealed an occurrence of less than 1 percent (3). As few as 13 cases of metatarsal involvement have previously been reported in the world (4). Giant cell tumors occurring in these areas are believed to represent a more aggressive form of the lesion, as illustrated by it's distinctive clinical presentation and course.

Giant cell tumors of the small bones of the hands and feet appear to occur in a slightly younger age group and demonstrate a higher incidence of multicentricity than those occurring in other locations (2,6). These tumors have also been shown to demonstrate a higher incidence of local recurrence and pulmonary metastasis (2). As in the case report, the most common presenting feature of GCTs of the small bones, is a huge, soft tissue mass with loss of function preceding the onset of pain (1). The majority of patients with GCTs in other locations, present with pain described as an intermittent, dull ache that is aggravated by activity and relieved by rest (3,10). These tumors do not give rise to a visible swelling or palpable mass until the later stages (15). Local trauma or pathologic fracture usually directs attention to the site of tumor involvement leading to discovery (6) .

At presentation, tumor involvement of the small bones typically involves cortical destruction with breakthrough from the marrow space into the adjacent soft tissue, extending along the length of the bone, with pronounced subperiosteal bone formation (1). Perforation of the cortex does not indicate that the tumor is malignant (7). Tumors of the bones of the hands generally present at later stages because they are located in non-weight-bearing regions. In the phalanges, metacarpals and carpals, it is not uncommon for the tumor to occupy the entire bone at the time of presentation (7,14).

Tumor involvement of the long bones is more often eccentric, usually located in the epiphysis and extends progressively with little tendency to destroy the adjacent shaft until late in its course (10). Roentgenographic and histological features demonstrate the clinical aggressiveness, but are unreliable in predicting the clinical behavior of these lesions (3,16). Characteristics of small bone involvement often include whole shaft involvement, destruction of cortex, pressure effect on neighboring bones, grossly lytic lesions, calcification in soft tissue, disuse osteoporosis, fine honeycombed appearance, and joint involvement (Table 2) (1).

There are several surgical procedures employed for the excision of GCTs, depending on the tumor size and extent of soft tissue invasion. Intralesional excision or excision and curettage with bone grafting is currently the treatment of choice for GCTs of the long bones of the extremities (6,15). Excision of the main tumor mass is followed by careful curettage of the peripheral residual tumor tissue. There are many techniques available for extending the curettage or excision. Following

excision and curettage various agents have been applied to the tumor bed. Among these, phenol solution, polymethylmethacrylate, and liquid nitrogen are the most common agents employed (6,17). To date, there has been no documentation as to whether these agents have any effect upon local recurrence (6).

Wide local or marginal excision is the procedure of choice in more advanced lesions, such as the case of metatarsal GCT. Interpositional autogenous grafts, as the fibular autogenous graft in our case, and autograft arthrodesis, for biological reconstruction, most commonly accompany these procedures.

In far advanced stages, with extensive soft tissue involvement, radical excision is the treatment of choice. This procedure continues to remain an important and essential procedure for the eradication of GCT of the extremity (6). At the present time, there are no chemotherapeutic agents indicated for primary GCT (6). However, there are several regimens available for the preresectional control of pulmonary metastases (18). Radiotherapy, due to its close association with secondary sarcomatous transformation, is reserved for the rare, unresectable, primary or secondary lesion with a clear-cut diagnosis (15,18).

In summary, GCT involvement of the small bones of the hands and feet appears to represent a distinctive, more aggressive form of GCT. In general, the tumor presents in a younger age group, at a later stage and the initial complaint focuses on soft tissue mass and loss of function rather than that of pain (1,2,6). The greater risk of recurrence and the propencity for these patients to have multiple lesions, warrants a skeletal survey to rule out the presence of multifocal disease (1). Due to the aggressiveness of these lesions, wide local excision with or without autogenous graft and or arthrodesis, as opposed to curettage or curettage with bone grafting, should be considered as primary treatment.

Acknowledgment

The authors wish to thank Steven J. Jubelirer, M.D., medical director of the Cancer Care Center of the Southern West Virginia and associate professor of internal medicine at the West Virginia University Health Sciences Center-Charleston Division, for his contribution in manuscript preparation.

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Treatment of giant intracranial aneurysm with carotid ligation, saphenous vein bypass graft

JOHN H. SCHMIDT III, F.A.C.S.
Department of Neurosciences, Charleston Area Medical Center, Charleston
TODD A. WITSBERGER, M.D.
Department of Surgery, Charleston Area Medical Center, Charleston

Abstract

Giant intracranial aneurysms pose difficult problems for neurosurgeons. This article describes the technique of extracranial-intracranial saphenous vein bypass graft and carotid artery ligation as treatment to remove a giant intracranial aneurysm.

Introduction

Intracranial aneurysms occur in roughly 5 percent of adults over 20 years of age (1). Subarachnoid hemorrhage as a complication of aneurysm rupture occurs at a rate of approximately 11 cases out of 100,000 (2). Giant aneurysms (exceeding 2.5 cm. in diameter) comprise approximately 4 percent of intracranial aneurysms (3), and these patients will frequently present with signs and symptoms of intracranial tumor.

It is believed that the risk of aneurysm rupture is generally proportional to the size of the aneurysm (4). Unruptured symptomatic aneurysms have been found to rupture at a rate of 6.25 percent per year (5). The common technique of craniotomy with aneurysm neck clipping is not always possible for giant aneurysms due to the size of the aneurysmal neck and the presence of atherosclerosis within the aneurysm wall. Other techniques to remove giant aneurysms have recently been developed (6). These involve the "bypass" of the aneurysm and artery involved with simultaneous proximal and distal ligation of the parent vessel.

Case report

A 64-year-old man with a history of a giant intracranial right carotid aneurysm was admitted to the Charleston Area Medical Center. Some time ago, he had undergone coronary artery bypass surgery; and for the past 10 years he had been experiencing headaches and visual disturbances. At the time, the physicians treating him decided to take an expectant course rather than a direct surgical approach, which was perceived to be excessively risky. However, the patient's vision and the use of his left arm and leg were gradually deteriorating.

On physical examination, there was some impairment of intellect, hemianopsia and partial left central facial weakness. His left hand was clumsy, with increased tone in the upper and lower extremities. His gait was also slow.

He underwent CT scanning (Figure 1) and cerebral angiography (Figures 2A and 2C), which demonstrated the presence of the giant aneurysm of the internal carotid artery with its neck reaching from the ophthalmic artery to the origin of the middle cerebral artery. There was marked calcification and thrombus within the aneurysm. Craniotomy was accomplished by placing a saphenous vein graft with end-to-end anastomosis between the proximal external carotid artery and the middle cerebral artery (Figures 2B and 2D). Ligation of the common carotid artery at its origin in the neck and proximal middle cerebral artery clipping were accomplished simultaneously to trap the aneurysm (Figure 3). Subsequent to this, the extracranial internal carotid artery was aspirated distally to the site of ligation to decompress the aneurysm.

The patient was transferred to the Medical Rehabilitation Center at CAMC two weeks postoperatively, and was then discharged ambulatory and in stable condition.

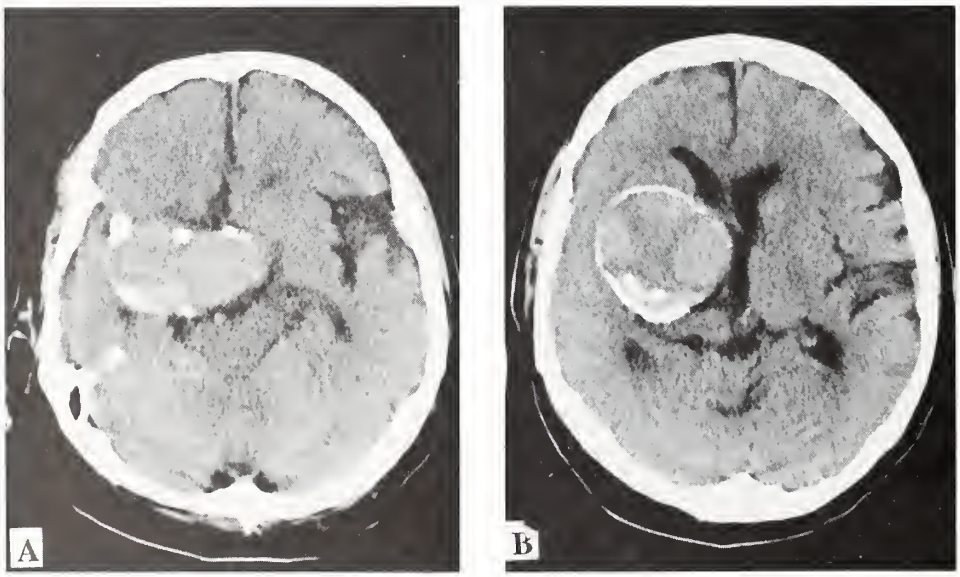

Figure 1 (A and B). Unenhanced CT scan showing giant, right, internal, carotid artery aneurysm with partial thrombus formation and wall calcification.

Discussion

Giant aneurysms present formidable problems in the consideration of direct surgical attack. Extensive atherosclerosis and the size of the aneurysm neck frequently preclude the direct clipping of the aneurysms at

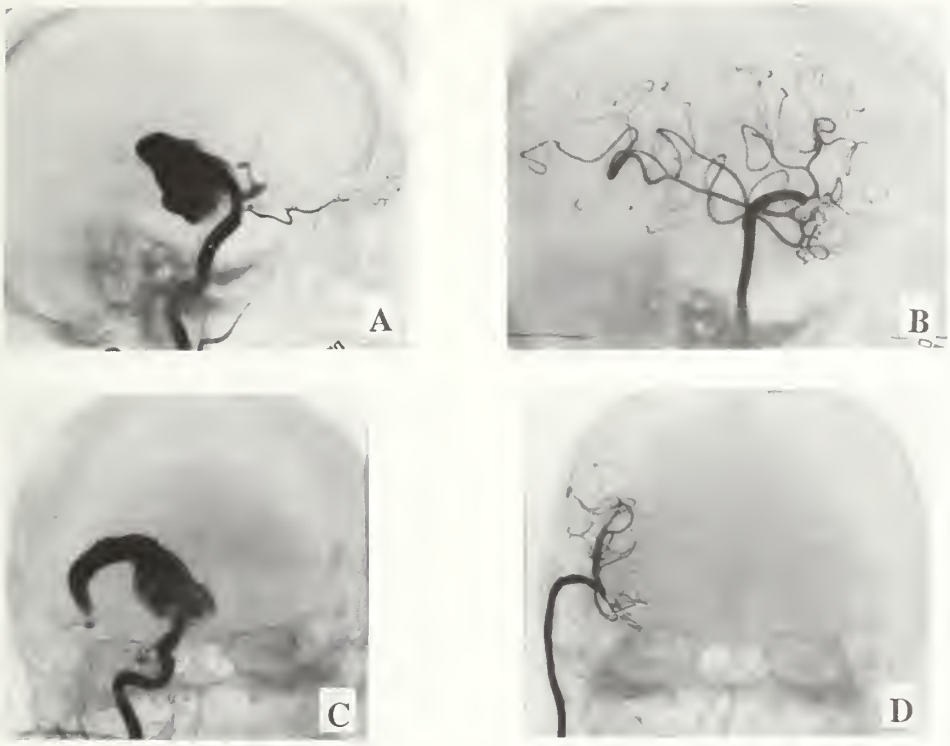

Figure 2. Carotid angiogram demonstrating the preoperative giant aneurysm in lateral (A) and AP view (C). Postoperative comparative studies demonstrating exclusion of the aneurysm and patent bypass graft to middle cerebral artery in lateral (B) and AP view (D).

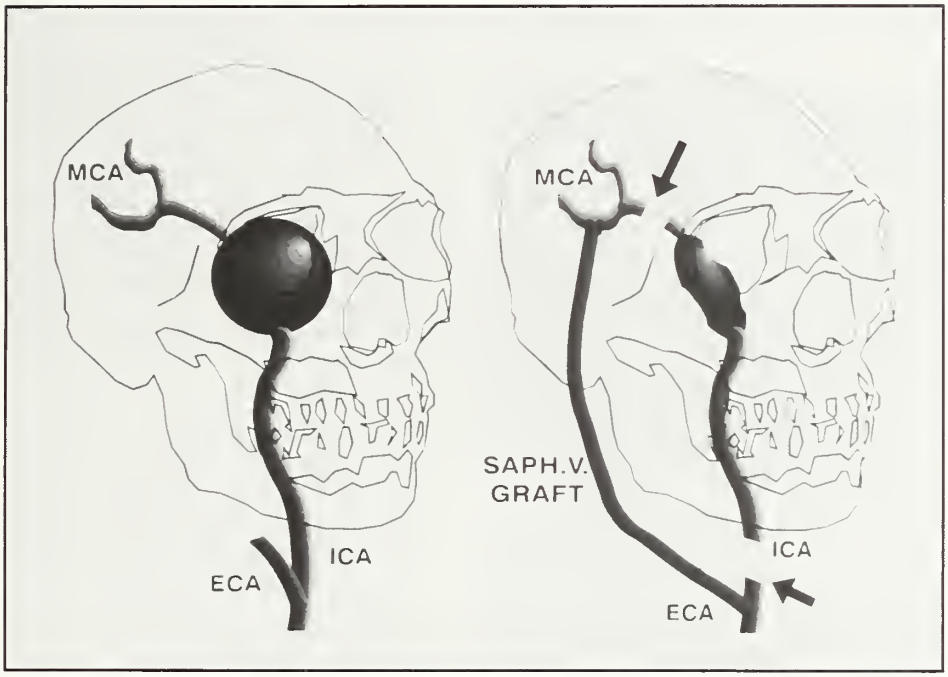

Figure 3. Schematic of extracranial-intracranial artery bypass surgery utilizing saphenous vein. Arrows indicate the points of internal, carotid artery ligation.

ECA= External Carotid Artery
ICA= Internal Carotid Artery
MCA= Middle Cerebral Artery

the neck. Extracranial-intracranial artery bypass surgery has been surgically possible since 1963 (7). The technique has usually involved a graft of the superficial temporal artery to the middle cerebral artery as treatment for intracranial carotid artery occlusive disease (8). More recently saphenous vein grafting is believed to significantly increase the blood flow to the middle cerebral artery with such bypass procedures (9). Sundt has reported the results of 20 patients with saphenous bypass grafts in the treatment of giant aneurysms of the anterior circulation (10). Fifteen of these patients reportedly had an excellent or good result from surgery, and there was only one death.

Extracranial-intracranial bypass procedures for cerebral ischemic disease remain controversial (10), but offer benefit to patients with "unclippable" and previously inoperable giant intracranial arterial aneurysms.

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Medical Grand Rounds

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Edited by Irma H. Ullrich, M.D., Professor of Medicine, Section of Endocrinology and Metabolism

Exercise testing for the primary care physician

DISCUSSANT:
ANTHONY P. MORISE, M.D.
Associate Professor of Medicine, Section of Cardiology

Abstract

In the primary care setting, exercise testing is frequently used to evaluate patients with known or suspected coronary artery disease. Appropriate utilization requires knowledge of the indications as well as the contraindications and interpretation of the variables generated by the test. While ST segment changes are widely regarded as the most important variable generated by the exercise test, other variables including ventricular arrhythmias, blood pressure response, ischemic symptoms, workload, and exercise capacity are also important and useful in interpretation. Consideration of the question being addressed, the clinical context, and the test adequacy are all important for proper interpretation. Interpretation concerning both diagnostic and prognostic questions should employ principles of both the categorical and probability approaches.

Introduction

Exercise testing is a familiar and commonly used method for evaluating patients with suspected or known coronary heart disease. Exercise electrocardiography is available in most hospitals and in many physicians' offices and is, without question, utilized by a significant percentage of primary care physicians in their daily practice (1). Since the more sophisticated imaging methods that are often applied with exercise testing (e.g. thallium scintigraphy and echocardiography) are not as widely available and are more expensive and technically demanding, exercise electrocardiography is relied upon by many as the first test to evaluate patients.

The appropriate application and interpretation of exercise electrocardiography is pivotal to the proper utilization of higher level testing including coronary angiography. In addition to inappropriate utilization, improper interpretation may lead to unnecessary anxiety and labeling the patient with an incorrect diagnosis. While no non-invasive test may be considered perfect when compared to higher standards, exercise testing, despite its imperfections, can still be quite useful. However, it behooves the practitioner to be aware of all aspects of proper interpretation. It is not the intent of this review to be exhaustive or to act as a cookbook; those points which concern the application of the exercise testing to the primary care setting will be emphasized. Those with an interest to delve deeper into these matters are directed to the following references (2,3).

TABLE 1
INDICATIONS FOR EXERCISE TESTING

1. **Suspected Coronary Disease:** Patients with symptoms suggestive of coronary artery disease:
   Class I: Men with atypical angina
   Class II: Women
2. **Preventive Screening:** Class II - Patients who are asymptomatic with one of the following scenarios:
   a. Two or more major risk factors prior to exercise program
   b. Apparently healthy with high risk occupation (pilots, firefighters, etc.)
3. **Assessment of Prognosis:**
   Class I - Known coronary disease or recent uncomplicated myocardial infarction
   Class II - Serial follow-up with known coronary disease
4. **Assessment of Therapy:**
   Class I - Following coronary bypass, angioplasty, or medical therapy
   Class II - Serial follow-up
5. **Class III:**
   a. Acute ischemic syndromes
   b. Uncompensated heart failure or other medical illness
   c. Asymptomatic patients not mentioned above
   d. Significant aortic stenosis

Indications for Exercise Testing

In discussing the indications for exercise testing, the following classification will be used:

Class I – General agreement that test is justified,
Class II – Frequently used, but divergent opinion with respect to value, and;
Class III – General agreement that test is of little or no value, inappropriate, or contraindicated.

When applied to coronary heart disease, there are four basic clinical questions that may be addressed with exercise testing (Table 1). These will be modified somewhat later during the discussion of interpretation. It should be mentioned that not all primary care physicians may feel inclined to encompass all of these indications into their practice. Nevertheless, with appropriate interest and experience, they may all be appropriate indications in the primary care setting.

Important Variables

Prior to dealing with interpretation, each of the variables that are generated by a standard exercise test and important caveats concerning each will be reviewed. These considerations will include both electrocardiographic and non-electrocardiographic results.

ST Segment Depression: The single variable that most practitioners would identify as the most important is exercise-induced ST segment change. In fact, ST segment change is one of the most important diagnostic

and prognostic variables. Any subsequent comments concerning ST segment depression assume that there are no baseline ST segment changes related to ischemia, ventricular hypertrophy, conduction disturbances (e.g. left bundle branch block), or drugs (e.g. digitalis). The presence of any of these conditions would tend to render any ST segment changes uninterpretable. Patients with these interfering conditions should be considered for exercise testing that utilizes scintigraphic or echocardiographic imaging as a means to detect ischemia (4,5,6).

When the diagnostic test characteristics of sensitivity and specificity are generally quoted in the literature for exercise testing, they almost always are based upon ST segment depression alone. The usual criterion for abnormal ST segment depression is ≥1 mm. 80 msecs following the J point if the ST segment slope is horizontal or downsloping (7). One should realize that rather than a fixed cutpoint, each increment of ST segment depression has a different sensitivity and specificity and represents a point on a continuum of risk for a true ischemic response. The same might be said for the ST segment slope (from rapidly upsloping to rapidly downsloping). In other words, the more mm. of ST segment depression that are present and the more downward the ST segment slope is, the greater the chance that the changes are predictive of true ischemia. For example, studies have shown that the more abnormal the ST segment slope, the greater the likelihood of multivessel coronary disease and the lesser the likelihood of not having atherosclerotic coronary disease (8).

The leads in which positive ST segment changes are seen also have a bearing as to their accuracy. ST segment depression does not localize ischemia to a particular region of myocardium. When true ischemia is present, it is much more likely to appear in the lateral precordial leads (V4 - V6). Therefore, ST segment depression seen exclusively in the inferior (II, III, aVf) or the anterior leads (V1 - V3) is much more likely to be falsely positive (9). The exception to this occurs in patients with Q wave infarctions where ST segment depression noted in any lead has prognostic significance.

The exercise workload (commonly referred to as rate-pressure product) at which any ST segment change occurs, also has important implications. ST segment changes that occur at low workloads (e.g. rate-pressure product < 15,000) are more likely to be a true positive response and, in turn, associated with a worse prognosis. If ST segment depression occurs more prominently (or only) in the post-exercise period, this carries the same significance as do changes occurring or maximizing during exercise (10).

Computerization of the exercise electrocardiogram has led to improved appearance of the QRST complex with algorithms to average complexes and to correct for respiratory and muscle movement artifact. In addition, graphs that indicate trends of ST segment (or other variables) change are also easily generated. While this greater sophistication leads to seemingly improved tracing quality and easier analysis, the raw ECG strips for each minute of each stage should also be scrutinized prior to analyzing the more refined output. These refinements are not without their own sources of error (11). Likewise, newer computer generated scores (e.g. ST/Heart Rate slope or the Hollenberg score) should not be solely relied upon as there is still controversy as to whether they are an improvement over standard ST segment analysis (12).

Presently, there exists an impression that exercise ECG is less accurate in women than in men. This is based upon higher false positive rates in women. However, this conclusion does not consider that coronary disease is less prevalent in women than in men. There is a substantial body of literature that supports the notion that oral estrogen favorably affects both the prevalence and the prognosis of coronary disease in women (13). Recent studies suggest that women who are postmenopausal and not on estrogen replacement therapy have a similar prevalence of disease and, correspondingly, a similar positive predictive value for ST segment changes as men (14). While studies are ongoing concerning these observations, there is little reason to think that normal ST segment responses in women are any less accurate than in men.

ST Segment Elevation: Exercise-induced ST segment elevation noted in ECG leads with pathologic Q waves from previous myocardial infarction generally does not indicate ischemia. Rather, it is associated with a significant wall motion disturbance in the infarct territory. ST segment elevation in non-infarct leads or in patients without a history of infarction indicates very intense ischemia usually requiring immediate invasive evaluation (15).

Ventricular Arrhythmias: Exercise-induced ventricular arrhythmias, i.e. complex premature beats and non-sustained ventricular tachycardia are of particular importance in patients with known coronary disease. They indicate a group at higher risk of sudden death and should be evaluated accordingly. Since exercise-induced ventricular arrhythmias can be seen in patients with non-coronary heart disease, the mere presence of these arrhythmias in patients without known coronary disease has reduced diagnostic significance. However, when combined with significant ST segment changes, the diagnostic and prognostic value of the ST segment changes alone is improved (16).

Systolic Hypotension: If systolic blood pressure falls below pre-exercise values, this is a reliable indicator of a fall in cardiac output related to ischemia. Its presence, even in patients on antihypertensive medication, indicates a bad prognosis.

Ischemic Symptoms: The production of angina or its equivalents with exercise, especially if this is reproduction of the patient's historical complaint, can be useful in determining whether the patient's complaints are due to ischemia. When compared to ST segment changes alone, the combination of ST segment changes and angina usually indicates more significant disease (17).

Performance Variables: The performance variables include peak workload and capacity, respectively considered as rate-pressure product and METS. These variables can be thought of as respective surrogates of oxygen demand and oxygen utilization or uptake. Normally, there is a gradual increase in workload for each graded stage of exercise. Normal sedentary subjects should be able to achieve workloads of over 25,000 and capacities of 7-10 METS. Deconditioned

or diseased individuals frequently have poor exercise capacity while achieving high workloads. Conversely, patients on rate or pressure-reducing medications or with chronotropic incompetence often show the opposite response with exercise capacity out of proportion to the workload that is achieved.

How, then, are these performance variables useful in interpretation? Once again, it is necessary to look at the reason for conducting the test. For diagnostic studies, the adequacy of the study is frequently judged by the achieved workload and not the exercise capacity. Therefore, in this setting, discontinuing medications that will interfere with maximum workload achievement is desirable. Patients who are unable to stop these medications or, for other reasons, are unable to attain adequate workloads (or even exercise at all) should be considered for pharmacologic stress testing using dipyridamole, adenosine, or dobutamine (18).

TABLE 2
EXERCISE TEST INTERPRETATION

Consider clinical question being addressed:
Diagnosis (suspected disease) versus Prognosis (known disease)

Consider whether to continue medications

Resting ECG abnormal?
Consider concurrent cardiac imaging study

Diagnosis

1. **Clinical Context**
   Assess pretest probability
   Low (< 25%) - Beware of false positives
   Intermediate (25-75%) - Consider need for concurrent cardiac imaging
   High (> 75%) - Beware of false negatives; use for prognosis
2. **Test Adequacy**
   Positive endpoint achieved?
   Workload (Rate-pressure product) > 20,000?
   If test inadequate, consider pharmacologic stress test
3. **Positive ST-segment depression**
   Consider quantity, slope quality, leads, workload, and duration
4. **Probability Estimate**
   may assist in decision making

Prognosis

1. Consider ST-segment response, exercise capacity, and exercise symptoms
2. Compare to previous studies concerning workload thresholds

Concerning prognostic studies, the achieved workload may be irrelevant to the assessment, while the capacity generally is much more important. Numerous studies attest to the prognostic value of exercise capacity (19). Medications need not necessarily be discontinued for prognostic assessments (20). In fact, it is often useful to assess the impact on prognosis of medications which blunt the workload response (Table 2).

Proper interpretation of any test result, including exercise test results, depends upon consideration of both the question being addressed and the clinical context.

Question and Context: The question being addressed is generally one of the indications noted earlier. These questions can usually be boiled down to two, i.e. diagnosis (with suspected disease) and prognosis (with known disease). While it may be possible to address both questions in many patients, it may be neither appropriate nor possible to adequately address one or both of these questions in some patients.

The clinical context refers to what is already known about the patient before test results are generated. This information generally comes from consideration of pre-exercise test history, physical, and other laboratory findings. Pretest variables considered in diagnostic settings include age, sex, chest pain symptoms, and other identified risk factors (cigarette smoking, glucose intolerance, systolic blood pressure, serum cholesterol, resting electrocardiogram, family history, menopausal status). Pretest variables considered in prognostic settings would include some of the above as well as previous infarction (location and size), congestive heart failure, resting ventricular function, and coronary anatomy. Most practitioners can recognize that consideration of the above pretest variables would yield a pretest clinical "hunch" as to whether coronary disease is present or whether a subsequent coronary event is likely to occur. It is this pretest assessment that will help determine the appropriateness of exercise testing.

Test Adequacy: Interpretation usually begins with a categorical approach. For diagnostic questions, we first need to determine whether the test is adequate in terms of workload. For the patient that has experienced a positive endpoint e.g. significant ST depression or fall in blood pressure, the consideration of adequacy becomes a moot issue. For the patient who fails to achieve either a positive end-point or a rate-pressure product of at least 20,000, the test is usually considered inadequate. Duplication of historical symptoms during exercise may be helpful, but in the absence of an adequate workload, its diagnostic significance may be unclear.

Positivity or Negativity: Once adequacy is confirmed, the next issue becomes determining the true or false positivity or negativity of the ST segment results. Here considerations of the clinical context become relevant and will be discussed later. When evaluating ST segment changes, one should consider the ST segment slope quality, the leads that are positive, the workload at positivity, and the duration of positivity following exercise. False positive studies are more likely to occur when ST segment changes are rapidly upsloping, located in non-lateral leads, and associated with high workloads and brief post-exercise duration.

Probability of Disease: In order to appreciate how the clinical context assists in interpretation, it is necessary to first understand the probability approach. The probability approach has also been referred to as a Bayesian approach (21). The following statement best reflects the basis for this approach as expressed in Bayes' Theorem: the predictive value of a test is dependent upon the prevalence of a bad outcome, i.e. disease presence or event occurrence, in the population under study. Stated more clinically, what is known about the patient's chance of a bad outcome before testing directly affects the interpretation of his/her test results. Estimating disease prevalence, i.e. defining the clinical context or the pretest probability of a bad outcome in an individual patient is, therefore, the beginning of any exercise test interpretation. This can be accomplished by several means.

For diagnostic purposes, there are published tables (22) which allow for the estimation of pretest probability based upon age, sex, and symptoms. Likewise, user-friendly computer

software also exists to allow for the incorporation of other pretest variables (23). (Information concerning the tables, nomograms, and software mentioned in this article can be obtained by contacting the author.) These same tables and software will also incorporate test results, e.g. ST segment depression, to modify the estimate of disease probability accordingly (24). While "positive" and "negative" ST segment responses respectively raise and lower the estimated probability of disease, the amount that the probability is raised or lowered depends in large part on what the probability was before testing.

Once the pretest estimate is determined, we can then appreciate whether the prevalence is high (> 75 percent), intermediate (25 percent - 75 percent), or low (< 25 percent). For diagnostic purposes, exercise testing is recommended for only intermediate and low prevalence groups. High prevalence groups should not be subjected to exercise testing to rule out coronary disease because despite a negative or normal exercise response, the post test probability of disease will still be considerable. Therefore, in high prevalence patients, exercise testing can only be used to assess prognosis.

Prognosis: Concerning prognosis, a similar approach can be taken. Studies have shown that the three most important exercise ECG variables that define prognosis are exercise capacity, exercise angina, and ST segment responses (25). In addition, other variables have obvious prognostic impact (exercise hypotension and arrhythmias), but because of their infrequent occurrence, they will not be discussed further. Next, the categorical risk group (high, intermediate, and low) can be defined based on these variables and then, using software or published nomograms, the estimated quantitative effect of these results on mortality can be determined. Obviously, if all three variable results are either favorable or unfavorable, these will define the low and high risk groups. Once again, nomograms and software are available to analyze the effect on prognosis of one or two unfavorable variables (25,27). Comparison of present test results to previous test results is useful and allows for an appreciation of the impact of time, i.e. disease progression, or a prescribed treatment on prognosis.

Intent of Testing: Exercise testing should be undertaken with some thought as to the intent of testing and whether the test can adequately address that intent. If the principle question is diagnosis and the pretest probability falls in the high prevalence range, it is unlikely that exercise testing even with the addition of concurrent cardiac imaging will adequately answer this diagnostic question. Of course, in this situation, a positive result confirms the initial prevalence grouping and provides important prognostic information. However, I am more concerned about the test result that would ordinarily be interpreted as negative or normal.

For these patients, a false sense of normality can be generated by incorrectly interpreting test results such as these by suggesting the absence of disease. For intermediate (and even low) prevalence patients, evaluation of whether negative or normal test results will lower the probability of disease to a satisfactorily low level can be done *prior to actually performing the test.* Not infrequently in situations such as these, angiography may be deemed to be more appropriate than continued non-invasive testing when the estimated post test probability cannot be lowered sufficiently to make coronary disease unlikely, i.e. a low final probability of disease.

How low should the probability be? There is no definite answer to this question and there probably should be no set answer. Practitioners needs to decide for themselves and for each patient what level of probability will be tolerated. For some, probabilities under 15 percent will be acceptable, while for others, only probabilities under 5 percent will be acceptable. Practitioners must use clinical judgement as they incorporate these probabilities into their decision making.

It should be realized that these probabilities represent results in themselves. These results express in quantitative terms an estimate based upon a variety of variable results of how close we are to 0 percent or 100 percent probability of finding atherosclerotic disease on a coronary angiogram. This probability should not be a substitute for the practitioner who must make the clinical decision that is best for each individual patient.

Exercise testing is a technically simple study that can be performed in primary care settings. When correctly interpreted, it can be useful in both answering clinical questions and determining which patients need to be referred for more sophisticated testing. Proper interpretation, irrespective of the practice setting, incorporates the rules of both the categorical and probability approaches.

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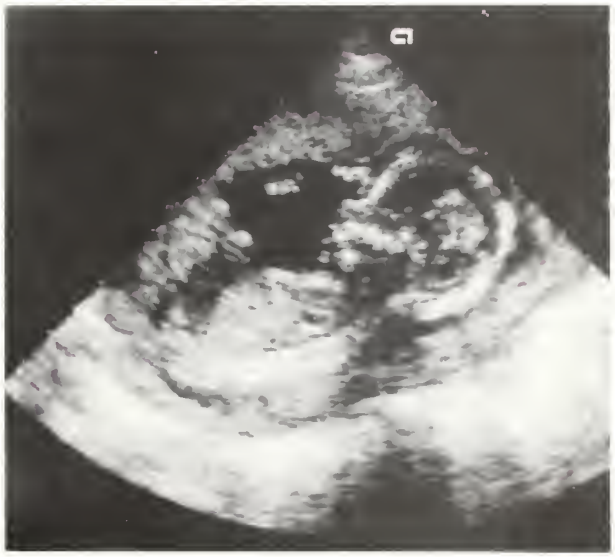

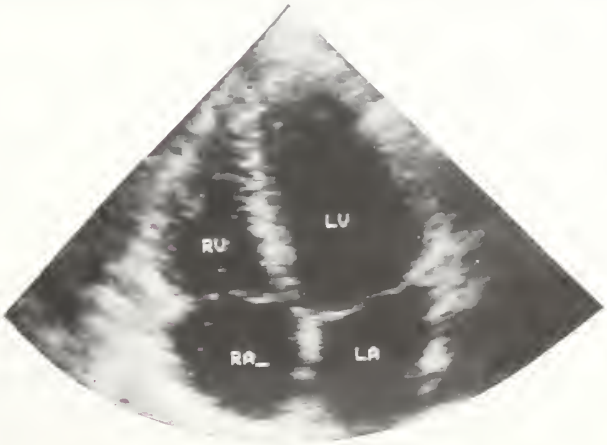

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Obstetrical

President's Page

Constantino Y. Amores M.D.

International Medical Graduates

International Medical Graduates (IMGs) are the doctors who attended medical schools that are located in other countries besides the United States and Canada. I feel it is important to understand the role that these physicians have played in the delivery of health care in the United States, and the value of their input in today's medical crisis.

To gain a true perspective on IMGs, you must take a look back into history.

After World War II, the returning soldiers who lived in rural areas found that there was a critical shortage of physicians to care for them and their families. Since many corporations and coal companies were hiring their own physicians, this had substantially depleted the number of physicians who were available to care for the general public. States such as West Virginia were especially affected due to their large rural populations and the numerous coal companies in business.

To encourage the construction of rural hospitals, Congress came up with the Hill-Burton Act in the 1940s. This helped the situation, but the need for physicians was still great in the 1950s due to the rapid industrialization of America and the fact that on-site medical care had become a major part of union negotiations.

The advent of Medicare and Medicaid in the 1960s literally broke the back of the health care system in this country. Card carrying Medicare and Medicaid patients insisted upon their share of an already rationed number of physicians.

The medical schools in the United States could not keep up with the demands. Since hospitals, industry, and other groups were vying for their share of doctors, the best recourse was to recruit doctors from other countries.

To maintain the quality of care we are used to in this country, strict guidelines were established to obtain only the highest caliber of foreign physicians. This was accomplished through an agency called the Educational Council of Foreign Medical Graduates (ECFMG), which the government set up to closely screen potential physicians.

In a short amount of time, the United States was thus able to obtain some of the best medical graduates from around the world. The ECFMG was so effective in its quest, that countries officially complained to the United Nations about what they referred to as the "Brain Drain."

Professional and community acceptance of IMGs was sometimes a problem, but most were such a benefit to their colleagues and patients that they were soon appreciated and respected. Today, 38 percent of the practicing physicians in West Virginia are IMGs, and approximately 29 percent of the nation's doctors are IMGs.

Now, though, we find that the medical profession is being threatened by a force much greater that of any ethnic bias. We cannot practice medicine to the best of our capabilities because government and third parties are looking over our shoulders telling us what to do. A tort system is totally destroying the sacred privacy of our patient/doctor relationships and placing us in a potentially adversarial relationship with patients and their families - - creating a situation that is totally the opposite of the principles our profession is based upon.

Never in modern times have doctors been so low in public esteem, yet we have never been as effective at healing the sick. What a terrible and sad irony we are faced with.

For all the things happening to our profession, legislation is the common bond. We live by our laws and the changes in our profession have all come about as a result of legislation. We, unfortunately, have allowed this to happen.

Now, more than ever, it is critical that the IMGs in this state become an active part of the WVSMA and all its activities.

Since this is my last President's Page, I want to appeal to each and every IMG who has not been involved in WVSMA functions, to please wait no longer. The brotherhood of the medical profession is greater than any ethnic bias. We are living in a democratic form of government and numbers count.

The best chance we have to save our profession and better serve our patients is by joining together as one unified body. Then, and only then, can we make a difference in the practice of medicine.

Constantino Y. Amores, M.D.

Strange timing

Interesting contrasts sometimes leap out from television and radio and make one wonder at the timing.

A consumer advocate comes on and makes the pitch that too much medical care is being given at too high a cost. The reason for this is that hospitals compete with each other for patients by promoting and marketing expensive services and equipment, and by attempting to attract doctors who admit patients. What is needed is less duplication of facilities, more one hospital communities and fewer pieces of expensive diagnostic equipment. The coming changes in medical care will certainly bring all of these realities about.

We next hear from an AIDS activist. He tells us that AIDS victims need help to cope. They need counseling; a means of transportation to AIDS clinics; medication; regulations to restrict insurance companies from attempting to cull insurance applicants with positive AIDS tests from eligibility for medical benefits; fewer restrictive diagnostic criteria required in order to be counted as an AIDS victim so that thousands more AIDS victims not presently meeting those criteria can be found eligible for AIDS benefits; and more government money.

Money is the subject of both messages. One has no concern for the amounts of money needed. The other is ready to sacrifice anything in medicine to conserve money. Both are determined to effect radical changes in our present system of allotting care. Both believe they are allies in a noble cause. The two are traveling in directions 180 degrees opposed to each other.

What are the proposed criteria for eligibility for <u>any</u> medical care, not just for AIDS care? Is the only criterion need? Will each medically recognized disease or condition require organizational support to assure a place at the medical care dining table?

The consumer advocate fails to recognize that any given quantity of care costs a given amount of time, resources, skill, talent, compassion, and comfort under any system of medical care. The amounts of any of these items can be and are varied under different medical care systems. The only thing possible to modify is the amount of these things.

If the name of another commodity such as food, shoes, or automobiles were inserted in place of the words "medical care" in a paragraph describing the ills of our present medical care system, it would take no effort on the part of anyone to recognize that what is being described is RATIONING. Somehow this does not apply if the words medical care are left undisturbed. And yet, it is true, rationing is being proposed and planned for the equitable distribution of medical care.

We are witnessing a powerful effort to promote redistribution of the world's goods and resources on the basis of something other than merit, hard work, thrift, or even need. The final criterion for decision in regard to such questions as -- Who is to be the rationer? -- What are the criteria for care and the expenditure of precious money? -- is apparently to be the arbitrary opinion of one of the self-designated, kind-hearted people in the world. A socialist devotee, of course, whether or not called by any other name, is the only non-greedy and fair-minded person capable of dispensing such generosity.

Socialism certainly did not die with the death of communism. That event, once thought to have augured a worldwide rejoicing, seems only to have fertilized the precocious growth of ideas stemming from the resounding failure of that socialist ideal. The timing of this phenomenon is the most curious of all.

It is is said that people get the kind of government they deserve. It is frightening to think that we might deserve what we are apparently about to get in that regard.

– SDW

Pulliam to be installed as WVSMA president

Beckley Obstetrician/Gynecologist Robert P. Pulliam, M.D., will take the WVSMA presidential oath of office on Saturday, August 22, during the Second Session of the House of Delegates at the WVSMA's 125th Annual Meeting at The Greenbrier.

A native of Beckley, Dr. Pulliam obtained both his master's degree in biochemistry and his medical degree from the Bowman Gray School of Medicine in Winston-Salem, N.C. He completed his internship at University Hospital in Seattle and did residencies at The Sloan Hospital for Women and Columbia Presbyterian Medical Center in New York City.

A lieutenant commander in the U.S.N.R., Dr. Pulliam served in Newport, R.I., from 1966-68. Following his military service, Dr. Pulliam returned to Beckley to open his OB/GYN practice and he joined the staffs of Raleigh General Hospital, Beckley Hospital and Beckley Appalachian Regional Hospital.

A clinical professor of obstetrics and gynecology at Marshall University since 1984, Dr. Pulliam is currently enrolled in the MBA program at the College of Graduate Studies in Charleston. He is the co-founder of DOCS, Inc., a computer company for medical offices, and is also the founder and major medical officer in Professional Medical Ultrasonics, Inc., a full-service ultrasound laboratory.

A WVSMA member since 1968, Dr. Pulliam is a past president of the Raleigh County Medical Society, a fellow of the American College of Obstetricians/Gynecologists, and a member of the AMA, the West Virginia Obstetrical/Gynecological Society, the American Fertility Society and the American Association of Gynecologic Laparoscopists.

Dr. Pulliam is currently serving as chairman of Governor Caperton's Physician Provider Medicaid Enhancement Board and is a member of the Health Care Financing and Cost Control Task Force of the Health Care Planning Commission. For the past year, he has also been very busy with his political campaign for the West Virginia Legislature. He is running in the General Election as the Democratic candidate from Raleigh County for the House of Delegates.

Robert P. Pulliam, M.D.

In addition to his duties with the Executive Committee during the WVSMA Annual Meeting, Dr. Pulliam is a featured speaker for the First General Session on "The Practice of Medicine in West Virginia After the Health Care Planning Commission." His talk will highlight the activities of the Health Care Financing and Cost Control Task Force of the HCPC, of which he is a member. Also, as a special highlight at this year's Annual Meeting, Dr. Pulliam will be hosting a reception for component society presidents and Council members on Wednesday, August 19 at 5 p.m. in Room 6613, the WVSMA's Hospitality Suite at The Greenbrier.

In his inaugural address "Drumbeats of Change," Dr. Pulliam will focus on the new direction he plans for the WVSMA as president.

"There are some people who make changes - some people who watch changes - and others who never know that changes have occurred," Dr. Pulliam said. "I plan to ask each WVSMA member to consider change and to empower me to implement those changes. In the Broadway play "Les Miserables," there is a song I often sing. The setting is the French Revolution and the words are 'When the beating of your heart echoes the beating of the drum, then tomorrow a new life will begin.' I want the WVSMA members to listen to the drumbeat of change in the medical system, attune their hearts to that beat and join me in making changes that will benefit medicine, the WVSMA and most importantly, the patients we serve."

Remember to attend dance lessons, formal ball

Two special events at this year's WVSMA Annual Meeting will be ballroom dancing lessons and a formal ball featuring the music of the 19-piece Bo Thorpe Orchestra and a fashion show.

The ballroom dancing lessons will be held on Thursday, August 20 in the Colonial Hall at The Greenbrier from 9 p.m. - 11 p.m. The instructors will be Jerry and Sherry Rose of Beckley.

The formal ball will be held from 8 p.m. - midnight on Friday, August 21 also in the Colonial Hall. A special fashion show is scheduled while the band takes a break.

Tickets for the dance lessons cost $25 per couple and tickets for the formal ball and fashion show are $50 per couple. Proceeds from these functions will go to AMA-ERF.

Tickets can be purchased at both the WVSMA and WVSMAA registration desks at The Greenbrier or at the door prior to each of these events. In addition, tickets may also be obtained by sending in the WVSMA Annual Meeting registration form which appears on Page 362.

At WVSMAA Annual Meeting

AMA, SMA Auxiliary leaders headline program

Priscilla Gerber

Emily Shelton

Janie Altmeyer

Pacita Salon

Priscilla Gerber, president of the American Medical Association Auxiliary, and Emily Shelton, president of the Southern Medical Association Auxiliary, are the featured speakers at the WVSMA Auxiliary's 68th Annual Meeting at The Greenbrier, August 19-22.

Mrs. Gerber will deliver the keynote address to the auxilians on Thursday morning, August 20, during the First Session of the House of Delegates; and Mrs. Shelton is scheduled to speak the following morning at the Second Session of the House of Delegates.

Janie Altmeyer, president of the WVSMAA, will preside over the business meetings at the convention, and Mrs. Gerber will install Pacita Salon as the new president at the end of the Second Session of the House of Delegates.

Speakers profiled

Mrs. Gerber of Winter Haven, Fla., was installed as president of the AMA Auxiliary in June. She had previously served at the national level as president-elect; southern region vice president; treasurer, director and chairman of the AMA-ERF and Finance Committees; as well as president of both her state and county auxiliaries.

In addition to her auxiliary activities, Mrs. Gerber has been involved in a variety of volunteer efforts in Polk County where she resides. She has served on the Board of Directors of both the Florida Informed Parents and PRIDE of Polk County, and was the founder and coordinator of Project Graduation in Polk County. She was also the originator and chairman of the Polk County Community Roundtable of Civic Leaders, Polk County Teen Boards and Winter Haven Teen Mall Party Night.

A founder of her temple, Mrs. Gerber has acted in many capacities over the past several years, including newsletter editor for 10 years. She has received many special honors such as the Bankers' Cup Award for Winter Haven Woman of the Year, the Golden Apple School Volunteer award, and Community Service Award from the Junior Service League.

A graduate of the University of Maryland, Mrs. Gerber holds a bachelor of science degree and a master's degree in education. She and her husband, Bruce, a radiologist, have four sons.

Mrs. Shelton has served in numerous roles with the AMA Auxiliary and SMA Auxiliary, as well as in her home state of Texas with the Texas Medical Association Auxiliary and the Angelina County Medical Auxiliary. In addition to her current role as SMA president, she is also a delegate to the AMA Auxiliary Association and has served in this capacity since 1982.

Devoted to civic endeavors, Mrs. Shelton was appointed by former Texas governor Mark White and reappointed by former Governor William Clements to the nine-member Council on Child Abuse and Neglect Prevention. She is a former member of the State Advisory Council for the Texas PTA/Texas Department of Human Resources Child Abuse Prevention Project, and has been active in the PTA, the Girl Scouts and the Angelina County Youth Advisory Council.

In addition to her auxiliary and civic projects, Mrs. Shelton has focused much of her attention on cultural events and is presently a member of the Board of Advisors of the Friends of the Arts at Stephen F. Austin University and the Angelina County Historical Commission.

Mrs. Shelton graduated from Baylor University with a bachelor of music degree in music education. She and her husband, William, a radiation oncologist, have three daughters.

New president highlighted

Mrs. Salon graduated salutatorian of her class in registered nursing at San-Juan de Dios Hospital in the Philippines and came to the United States in 1960 with an exchange program. She trained at St. Mary's Hospital in Rochester, Minn., under the direction of the Mayo Clinic.

While working at the hospital that year, Mrs. Salon met her husband, Iligino, who was applying for a fellowship at the Mayo Clinic, and they were married shortly afterward. During the next six years, the Salons lived in several cities in the U.S. so Dr. Salon could complete his medical residencies. After his postgraduate studies were finalized, they moved to

Canada where he worked for five years as a medical officer for the government of Newfoundland.

The Salons settled in Beckley in 1971 with their four children and Mrs. Salon became involved in the Raleigh County Medical Auxiliary and the WVSMAA. During the past 20 years with the Raleigh County Medical Society, Mrs. Salon has served as president twice and has been involved with many special projects including raising funds for the Women's Resource Center, creating and helping to implement a smoking cessation program at Raleigh General Hospital, and organizing health and parenting presentations at Beckley Junior High School. In 1989, she served as southwestern regional director for the WVSMAA, then in 1990 she became vice president of the WVSMAA, and in 1991 assumed her current role as president-elect.

For the past two years, Mrs. Salon has been on leave from her position as a registered nurse at Raleigh General Hospital to attend to her leadership duties with the WVSMAA. Her theme for this year will be "Commitment, personal touch and dedication to the health of America."

Neurological problems topic of OSU seminar

"Neurology for the Non-Neurologist," a conference that will offer an overview of neurological problems, is scheduled for October 2 and 3 at the University Ramada Hotel in Columbus. This course is sponsored by the Ohio State University College of Medicine, the Department of Neurology, University Hospitals, and the Center for Continuing Medical Education.

Among the topics to be discussed are new approaches to headache management, current perspectives in the diagnosis and management of multiple sclerosis, and the neurologic complications of AIDS. The program is designed for internists, family physicians, physiatrists, psychiatrists, and other health care professionals.

This program meets the criteria for 9.5 hours of Category I of the AMA's Physician's Recognition Award.

For more details, contact Ohio State's Center for CME at 1-800-492-4445 or (614) 292-4985.

Surgery Section Breakfast Meeting to feature renown trauma specialists

Two nationally recognized trauma physicians, Donald Trunkey, M.D., professor and chairman of the Department of Surgery at Oregon Health Sciences University in Portland, Ore., and Howard R. Champion, M.D., chief of trauma service and director of Surgical Critical Care and Emergency Services at Washington Hospital Center in Washington, D.C., will be speaking at the WVSMA Surgery Section Breakfast Meeting on Friday, August 21 at 7 a.m. at The Greenbrier.

Chang

Drs. Trunkey and Champion will be addressing the topic of "Controversies in Trauma" at the breakfast session which will be held during the WVSMA's 125th Annual Meeting. This meeting is open to all registered participants at the WVSMA Annual Meeting.

Thomas H. Chang, M.D., chairman of the WVSMA Surgical Section and program chairman for the WVSMA Annual Meeting, will moderate this session. Dr. Chang is currently a clinical professor of surgery at the WVU Health Sciences Center and a clinical professor of medical science at Alderson Broaddus College. He plans to bring up the following issues for discussion by Drs. Champion and Trunkey:

1) Fatal reaction to fibrin glue
2) DPL vs. CT
3) Trauma system error and preventable death
4) Who should treat injured children – an adult trauma surgeon or a pediatric surgeon?
5) Packing vs. clamping
6) Select gut decontamination
7) Transesophageal echocardiography

Following the WVSMA Surgery Section Breakfast Meeting, Drs. Trunkey and Champion will be two of the panelists for the Second General Session which is entitled "What's New in Trauma?" The two other panelists for this session will be Howard H. Kaufman, M.D., professor and chairman of the Department of Neurosurgery at WVU in Morgantown, and Gregory A. Timberlake, M.D., associate professor of surgery and director of the Jon Michael Moore Trauma Center in Morgantown. Dr. Chang will also be the moderator for this panel discussion.

Biographical information about Drs. Trunkey, Champion, Kaufman, and Timberlake was published in the April issue of the *Journal*.

WEST VIRGINIA UNIVERSITY SCHOOL OF MEDICINE
OFFICE OF CONTINUING MEDICAL EDUCATION

18th Annual Hal Wanger Family Medicine Conference

September 17, 18 & 19, 1992

Registration Form

Registration-Enrollment is recommended by August 31, 1992

Name _____ Specialty _____

Address _____ City _____ State _____ Zip _____ County _____

Daytime Telephone ( ) _____ SS# _____ - _____ - _____

Please specify the exact name you would like printed on your certificate. Print or type name

_____

Course Fees*

	Price	Quantity	Total
Thursday, Friday and Saturday	$180		
Thursday and Friday only	$160		
☐ Thursday only ☐ Friday only	$ 80		
Saturday	$ 70		
Football Tickets (limit 4) WVU vs. Maryland	$ 17		
# of guests attending "Mountaineer Physicians" Tailgate Tent	no charge		
		Total	

**Course fees include conference materials, meals, and Saturday parking.*

Credit Card payment: Please charge my ☐ Visa ☐ MasterCard Please include card number _____

Expiration Date _____ Authorization Signature _____

Make check payable to *WVU Foundation* and return with this form to:
Office of Continuing Medical Education,
1244 Health Sciences South
West Virginia University, Morgantown, WV 26506

Special Requirements

If you require access and parking for the handicapped, please so indicate:

_____

Continuing Medical Education

Listed on this page are some of the upcoming CME programs which will be held in the state.

The programs this month were compiled by: Patricia Barnhart, WVSMA loss control coordinator; Robin Rector, coordinator for CME for Charleston Area Medical Center; and Kari Long, program director of CME and rural services for WVU.

Futher details about these CME activities may be obtained by calling Barnhart at 925-0342; Rector at 348-9580; and Long at 293-3937.

If you would like to have the CME programs offered by your institution or association for physicians published in the *Journal*, please contact Nancy Hill, managing editor, at 925-0342.

West Virginia State Medical Association - Charleston

Aug. 19-22 - "WVSMA's 125th Annual Meeting," The Greenbrier, White Sulphur Springs

CAMC/WVU Health Sciences Center - Charleston

Aug. 13 - "1992 Ostomy Update and Educational Fair," 8 a.m. - 4 p.m.

Aug. 24 - "Pain Management," (teleconference)

WVU Health Sciences Center - Morgantown

Aug. 28-29 - "Third Annual Conference for the Hearing Impaired"

Sept. 5 - "Emergency Medicine"*

Sept. 11-12 - "Ob/Gyn Update 1992"

Sept. 17-19 - "18th Annual Hal Wanger Family Medicine Conference"*

** Held in conjunction with a home football game*

Outreach Programs

Key to Sponsors

★ *WVU Health Sciences Center, Morgantown*

☐ *CAMC/WVU Health Sciences Center, Charleston*

Fairmont ★ Fairmont Clinic, August 19, "Pre-operative Evaluation," David Elnicki, M.D.

Fairmont General Hospital, September 6, 7:30 p.m., "New Drugs for Induction of Ovulation," Roger Toffle, M.D.

Man ☐ Man Appalachian Regional Hospital, August 18, 7 p.m., "Pediatric Surgical Problems," Eduardo Suson, M.D.

Martinsburg ★ VA Medical Center, September 1, "Gastrointestinal Endoscopy," Ronald Gaskins, M.D.

New Martinsville ★ Wetzel County Hospital, September 10, "Approach to Evaluation and Treatment of Cardiac Arrythmias," Abnash Jain, M.D.

Parkersburg ★ Camden-Clark Memorial Hospital, September 2, 7 a.m., "Ethical Issues in the Treatment of AIDS," Bruce Weinstein, Ph.D.

Philippi ★ Broaddus Hospital Association, August 13, 7 p.m., "Lasers in Gastroenterology," John Shamm'a, M.D.

Broaddus Hospital Association, September 10, 7 p.m., "Mechanisms of Bacterial Pathogenicity," Irvin Snyder, Ph.D.

Point Pleasant ☐ Pleasant Valley Hospital, August 27, noon, "Abdominal Aortic Aneurysms," Ali AbuRahma, M.D.

Ripley ☐ Jackson General Hospital, August 14, noon, TBA

Spencer ☐ Roane General Hospital, August 18, 12:30 p.m., "Chronic Sinusitis," Romeo Lim, M.D.

White Sulphur Springs ★ The Greenbrier Clinic, August 24, "The Basic Eye Examination," Judie Charlton, M.D.

The University of Virginia Schools of Medicine and Law present:

MEDICINE & PUBLIC POLICY in the 90's

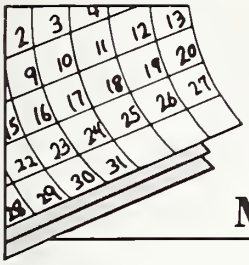
A Program for the Practicing Physician

September 18-19, 1992
The Boar's Head Inn, Charlottesville, Virginia

This conference includes a full-day Friday session on the involvement of government in the health care process, medical malpractice liability, and medical no-fault insurance. The half-day Saturday program addresses ethics, law, and the practice of medicine. The program highlights national authorities in the areas of law and medicine.

The University of Virginia School of Medicine designates this continuing medical education activity for 9 hours in Category 1 of the Physician's Recognition Award of the American Medical Association. The University of Virginia School of Medicine is accredited by the Accreditation Council on Continuing Medical Education to sponsor continuing medical education for physicians.

For more information, call U.Va. MIRS at
1-800/552-3723



Medical Meetings

August

19-22—WVSMA's 125th Annual Meeting, White Sulphur Springs
28-29—Third Annual Hearing Impaired Conference, West Virginia Hospital Research and Education Foundation, Inc. (sponsor), Charleston

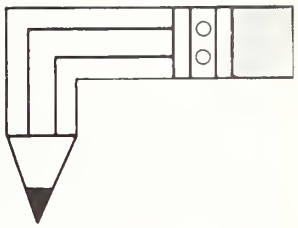
September

3—Surviving Physician Payment Reform, WVSMA (sponsor), Wheeling
8-13—American Academy of Neurological and Orthopaedic Surgeons, Las Vegas, Nev.
9-12—Challenges and Controversies in Cancer Research, Ohio State University, Columbus
10-12—American Gynecological and Obstetrical Society, Hot Springs, Va.
11—Successful Money Management for Mid-Career Physicians, AMA (sponsor), Baltimore
12—Financial Strategies for Successful Retirement for Mid-Career Physicians, AMA (sponsor), Baltimore
12—Advanced Trauma Life Support™ Abbreviated Instructor Course, District of Columbia Committee on Trauma of the ACS and the Georgetown University Medical Center Office of CME (sponsors), Washington, D.C.
13-17—American Academy of Otolaryngology - Head and Neck Surgery, Washington, D.C.
13-18—MRI One-Week Fellowship, MRI Education Foundation, Cincinnati
18—The Emerging Role of Colony Stimulating Factors in Clinical Oncology, Georgetown University Medical Center, Washington, D.C.
18—The Ecology of Graduate Medical Education: Part 1 - Exploration Before Reform, The American Board of Medical Specialties (sponsor), Chicago
19-23—American Urological Association Inc., Mid-Atlantic Section, Williamsburg, Va.
20-21—Introductory Perimetry Course, Ohio State University Department of Ophthalmology and the Ohio State University Center for Continuing Medical Education (sponsors), Columbus
20-24—American Society of Maxillofacial Surgeons, Washington, D.C.
24—Surviving Physician Payment Reform, WVSMA (sponsor), Beckley
25-26—The New Anti-Hypertensive Regimes, Ohio State University, Columbus
25-27—Dermatopathology, Ohio State University, Columbus

For More Information . . .

Contact the Journal at (304) 925-0342 for additional information about most of the above meetings.

Poetry Corner



Breakers

While looking through an art display,
I came upon a painting bold
Done by one of tender years;
Done for joy; not to be sold.

In shades of colors chosen well,
Recorded by the artist's hand,
Sea swells roll toward the shore;
White waves break o'er rocky sand.

Beautiful scene by moonlight lit;
Breathtaking vista viewed by day;
Breakers hit the rocky shoals,
Cascading on into the bay.

Captured in oil, on canvas framed,
The seascape brings a sense of peace;
And viewed by one who loves the sea,
A sense of calm and sweet release.

E. Leon Linger, M.D.

Please address your submissions for Poetry Corner to: Stephen D. Ward, M.D., Editor, West Virginia Medical Journal, Box 4106, Charleston, WV 25364.

The Stage Is Set!

The West Virginia State Medical Association's 125th Annual Meeting

August 19 - 22, 1992
The Greenbrier
White Sulphur Springs, West Virginia

Please be sure to make hotel reservations in advance by calling **1-800-624-6070.** The State Fair is the same week and the hotel fills up quickly. For information about other area hotels, call the WVSMA at (304) 925-0342.

Name _____

Address _____

Phone _____

Specialty _____

Physician Members and Physician Assistants - $125.00
Physician Non-members - $175.00 Students, Residents & Nurses - No Charge
Auxiliary Ballroom Dance Lessons - $25 per couple, Thurs., Aug. 20
Black Tie Formal Dance & Fashion Show - $50 per couple, Fri., Aug. 21

Enclosed is a check for $ _____
I will be attending the _____ dance lessons _____ formal dance/fashion show

Please send registration form and check to:
WVSMA
P.O. Box 4106
Charleston, WV 25364

America's Resort

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Our staff of 1600 ladies and gentlemen serving ladies and gentlemen excel at pampering our guests. You will dine sumptuously. From hearty breakfasts and six-course dinners, to a la carte dining in the Tavern Room, the more informal Golf Club or our newest dining experience, Draper's Cafe.

Play golf on a choice of three championship courses. Enjoy tennis on our 15 outdoor or 5 indoor courts. Jog or try our par-course Fitness Circuit, horseback ride, fish, swim, bowl, shoot trap and skeet, play croquet or schedule a session at our famed Spa and Mineral Baths.

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West Virginia State Medical Association

125th Annual Meeting
August 19-22, 1992
The Greenbrier, White Sulphur Springs, W.Va.
Convention Program

The WVSMA staff would like to recognize the members of this year's Annual Meeting Program Committee for their time and initiative in planning and organizing the convention:

Thomas H. Chang, M.D., Chairman

Constantino Y. Amores, M.D.
C. Richard Daniel, M.D.
Chinmay K. Datta, M.D.
Erlinda De La Pena, M.D.
David A. Denning, M.D.
Robert A. Gustafson, M.D.
Michael J. Lewis, M.D.
Michael A. Morehead, M.D.
Maurice A. Mufson, M.D.
Edward Pinney, M.D.
Stephen L. Sebert, M.D.
Mabel M. Stevenson, M.D.

Tuesday, August 18 (Preconference Meetings)

6:00 Executive Committee Meeting, Constantino Y. Amores, M.D., President, presiding, Pierce Room

7:30 Dinner, Fillmore Room

Wednesday, August 19

8:30 - noon Exhibit set-up

9:00 WVSMA Council Meeting, Constantino Y. Amores, M.D., President, presiding, McKinley Room

11:30 Council Luncheon, Chesapeake Bay

noon - 4:30 Registration, Exhibit Center Foyer

1:00 Exhibit Visitation

12:30 -1:30 Delegate Registration, Governor's Hall

1:30 - 4:30 FIRST SESSION HOUSE OF DELEGATES Governor's Hall

Call to Order and Welcome, Constantino Y. Amores, M.D., President

Invocation - Reverend Edward P. Sadie

Introductions:

- Visiting State Presidents
- 1992 Annual Meeting Program Committee
- Mrs. Robert B. Altmeyer, WVSMAA President
- Steve Brenton, WV Hospital Association President
- Kevin Kaufman, WVSMA Medical Student Section President

2:00 Thomas L. Harris Address
The Honorable Gaston Caperton, Governor, State of West Virginia
"Health: West Virginia's Future"

2:30 Break

3:00 Edmund B. Flink Address
Roger M. Des Prez, M.D., Professor of Medicine, Vanderbilt University, Chief of Medical Services, Veterans' Administration Hospital, Nashville, Tenn.
"The New Tuberculosis"

4:00 WVSMA Rural Health Physician of the Year Award

Presentation of AMA-ERF Grants

WVSMA Presidential Citation

Wyeth-Ayerst Physician Award for Community Service

4:15 Presidential Address, Constantino Y. Amores, M.D.

4:30 Business Meeting

- Constitution and Bylaws Committee Report, Harry L. Shannon, M.D., Chairman
- Nominating Committee Report and Speeches, Bill M. Atkinson, M.D., Chairman
- Introduction of Resolutions Robert P. Pulliam, M.D., Chairman

5:00 Adjournment

5:00 - 6:00 Hospitality Hour for WVSMA Component Society Presidents and Council, Robert P. Pulliam, M.D., President-Elect (Host), Room 6613

6:30 - 7:30 Presidential Reception, Taft Foyer

7:30 - 10:00 P.I.E. Mutual Insurance Annual State Managing Board Election
Eisenhower Parlor A

Thursday, August 20

8:30 - 3:00	Registration, Exhibit Center Foyer
8:30 - 1:00	Exhibit Visitation, Exhibit Center
8:30 - noon	FIRST GENERAL SESSION Governor's Hall
	Welcome, Constantino Y. Amores, M.D.
8:30 - 8:50	"The Practice of Medicine in West Virginia After the Health Care Planning Commission" Derrick L. Latos, M.D., Moderator
8:50 - 9:10	WV Health Service System Task Force, John D. Holloway, M.D., Wheeling
9:10 - 9:30	Basic Health Services Task Force, James L. Comerci, M.D., Wheeling
9:30 - 9:50	Health Care Financing and Cost Control Task Force, Robert P. Pulliam, M.D., Beckley
9:50 -10:10	Health Professions Task Force, Michael J. Lewis, M.D., Charleston
10:10 - 10:30	Break (Compliments of Chapman Printing Company)
10:30 - 10:50	Quality of Care and Practice Liability Task Force, Constantino Y. Amores, M.D., and Don R. Sensabaugh Jr., J.D., Charleston
10:50 - 11:10	Certificate of Need Task Force, Michael M. Stump, M.D., Elkins
11:10 - noon	Question and Answer Session
noon	Component/Specialty Society Presidents Luncheon, Constantino Y. Amores, M.D., and Robert P. Pulliam, M.D, presiding, Chesapeake Bay
noon	WVSMA Young Physicians' Section Luncheon Meeting, James D. Helsley, M.D., presiding, Grant Room
	Guest Speaker: Robert M. Wah, M.D., Chair-Elect, AMA Young Physicians
1:30	Committee on Resolutions, Robert P. Pulliam, M.D., presiding, Hayes Room
2:00	Golf, Tennis, and Volleyball Tournaments
3:00 - 5:00	WESPAC Meeting, Esther Weeks, Chairman, presiding, Fillmore Room
	Guest Speaker: Steve Haid, Perry and Haid Group, Inc., Charleston
6:30 - 7:30	Reception (Courtesy of CNA Insurance Companies and McDonough Caperton Insurance Group), Colonial Lounge and Terrace
9:00 - 11:00	Ballroom Dance Lessons, Jerry and Sherry Rose, Instructors, Colonial Hall

Friday, August 21

6:30 - 7:30	WV Academy of Otolaryngology-Head and Neck Surgery Meeting, F. Thomas Sporck, M.D., presiding, Grant Room
7:00 - 8:30	WVSMA Section on Surgery Scientific Meeting, Thomas H. Chang, M.D., presiding, Chesapeake Bay
	Donald D. Trunkey, M.D., Professor and Chairman, Department of Surgery, Oregon Health Sciences University, Portland, Ore.; and Howard R. Champion, M.D., Chief of Trauma Services, Director of Surgical/Critical Care and Emergency Services, Washington Hospital Center, Washington, D.C.
	"Controversies in Trauma"
7:30 - 9:00	WVSMA Sports Medicine Breakfast Meeting, David W. Avery, M.D., presiding, Tyler Room
	Guest Speaker: T. Glenn Pait, M.D., Dept. of Neurosurgery, WVU Health Sciences Center, Morgantown
8:30 - 3:00	Registration, Exhibit Center Foyer
	Exhibit Visitation, Exhibit Center
9:00 - 4:30	WV Section on Dermatology Meeting, Charles L. Yarbrough, M.D., presiding, Virginia Room
	9:00 - 10:00 - Business Meeting
	10:00 - noon - Scientific Meeting Warwick Morison, M.D., Johns Hopkins, Baltimore, Md.
	"Photo Sensitivity" and "PUVA Therapy in the 90s"
	1:00 - 3:00 - Scientific Meeting Algin Garrett, M.D., Medical College of Virginia, Richmond, Va.
	"CO_2 Laser Use for Office Dermatology"
	3:15 - 5:15 - Clinical Pathologic Conference
8:30 - noon	SECOND GENERAL SESSION Governor's Hall
	Welcome, Constantino Y. Amores, M.D.
8:30 - 9:00	"What's New in Trauma?" Thomas H. Chang, M.D., Moderator
9:00	"Head Trauma - Problems in Mild and Severe Injuries," Howard H. Kaufman, M.D., Professor and Chairman, Department of Neurosurgery, WVU School of Medicine, Morgantown
9:30	"Socio-Economics of Trauma Care," Howard R. Champion, M.D., Chief of Trauma Services, Director, Surgical/Critical Care and Emergency Services, Washington Hospital Center, Washington, D.C.
10:00	Coffee Break - Presentation of Trophies
10:30	"Pelvic Trauma Management in the 1990s," Gregory A. Timberlake, M.D., Associate Professor of Surgery, WVU School of Medicine, Morgantown
11:00	"Desert Storm," Donald D. Trunkey, M.D., Professor and Chairman Department of Surgery, Oregon Health Sciences University, Portland, Ore.

11:30 - noon	Question and Answer Session
noon - 1:30	WVSMA Cancer Committee Luncheon Meeting
	Catalino B. Mendoza Jr., M.D., presiding, Spring Room
noon - 6:00	WV Chapter American College of Emergency Physicians, Richard A. Capito, M.D., presiding, Hayes Room
	noon - 1:00 - Luncheon
	1:00 - 2:00 - Scientific Meeting
	John G. Thomas, Ph.D., Director, Clinical Microbiology and Virology, Dept. of Pathology, WVU Hospital, Morgantown
	"Emergency Medicine Microbiology Update"
	2:00 - 4:00 - Business Meeting
	The Honorable Robert E. Wise Jr., Congressman; and Debra M. Bryant, Coordinator, Political Action and Education, National ACEP
	"Getting Involved in Legislative Issues"
	4:00 - 6:00 - WVACEP Board of Director's Meeting
noon - 2:00	WV Chapter of American Academy of Pediatrics Business Meeting, Paul J. Jakubec, M.D., presiding, Grant Room
noon - 3:00	WV Psychiatric Association Meeting, Lee Neilan, M.D., presiding, West Virginia Room
	noon - 1:00 - Luncheon
	1:00 - 2:00 - Business Meeting
	2:00 - 3:00 - Scientific Meeting
	Richard Greenberg, M.D., Clinical Director, Washington Psychiatric Institute, Washington, D.C.
	"Prescribing New Antidepressants, Including Zoloft"
12:15 - 1:15	WV State Neurosurgical Society Luncheon, Howard Kaufman, M.D., presiding, Tyler Room
12:30 - 2:00	West Virginia Medical Institute Board of Trustees Luncheon Meeting, Harry S. Weeks Jr., M.D., presiding, Wilson Room
12:30	WVSMA Publication Committee Meeting Luncheon, Stephen D. Ward, M.D., presiding, Washington Room
1:00 - 3:00	WV State Orthopedic Society Meeting, Jack R. Steel, M.D., presiding, Van Buren Room
	1:00 - 2:00 - Scientific Meeting
	Robert N. Hensinger, M.D., President, American Academy of Orthopaedic Surgeons, Park Ridge, Il.
	"Back Pain in Children"
	2:00 - 3:00 - Business Meeting
4:00	1993 Annual Program Committee Meeting, Lee L. Neilan, M.D., presiding, Jackson Room
6:00 - 7:00	Reception, West Virginia and Marshall University Schools of Medicine, WVU and MCV Alumni Associations (Hosts), Cameo Ballroom
8:00 - midnight	Formal Ball and Fashion Show featuring the Bo Thorpe Orchestra, Colonial Hall

Saturday, August 22

7:30 - 9:30	WV Radiological Society Meeting, Dennis M. Burton, M.D., presiding, Lee Room
	7:30 - 8:30 - Scientific Meeting
	Carl Furhman, M.D., Dept. of Radiology, Presbyterian University Hospital of Pittsburgh
	"High Resolution CT of the Chest"
	8:30 - 9:30 - Business Meeting
7:30	Kanawha County Caucus Breakfast, William B. Ferrell Jr., presiding, Hayes Room
8:15 - 9:30	Delegate Registration, Chesapeake Hall Foyer
8:45	SECOND SESSION HOUSE OF DELEGATES Chesapeake Hall
	Call to Order and Welcome Constantino Y. Amores, M.D.
	Presentation of Colors
	Reaffirmation
	Necrology Report
	Introduction of Mrs. Iligino Salon, 1992-93 WVSMA Auxiliary President
9:00	"Communicating Compassion"
	John L. Clowe, M.D., President, American Medical Association
9:45	Break (Compliments of P.I.E. Mutual Insurance Company)
10:15	Business Meeting
	Vote on Constitution and Bylaws
	Election of Officers
11:30	Recess for Lunch
noon	Luncheon, WVSMA Past Presidents, Visiting State Presidents and 50-Year Graduates, Taft Room
1:00	SECOND SESSION HOUSE OF DELEGATES (Reconvene)
	Election of Officers (continued if necessary)
	Report of WVSMA Resolutions Committee, Robert P. Pulliam, M.D., Chairman
2:30	Break
3:00	Oath of Office and Presidential Address, Robert P. Pulliam, M.D., Beckley
4:00	"Ashland's America"
	Adjournment
6:30 - 7:30	Reception honoring newly installed officers of WVSMA and Auxiliary, Raleigh County Medical Society and Raleigh General Hospital (Hosts), Chesapeake Bay and Terrace

1992-93 WVSMA Delegates/Alternates

BOONE (2)
Delegates: Robert Atkins, Ron Stollings
Alternates: Probhond Chinuntdet, Manuel T. Uy

BROOK (2) - Names not submitted

CABELL (11)
Delegates: Paul Blair, Dennis M. Burton, David J. Hurry, G. William Lavery, Carl F. McComas, James R. Morris, Thomas F. Scott, Jack R. Steel, Philip R. Stevens, Joseph Touma, Charles Yarbrough
Alternates: Albert C. Esposito

CENTRAL WV (3)
Delegates: Greenbrier Almond, Arnold F. Gruspe, Rigoberto R. Ramirez
Alternates: Eusebio L. Villanueva

EASTERN PANHANDLE (4)
Delegates: Edward F. Arnett, Edward F. Pinney Jr., Harvey D. Reisenweber
Alternates: D. Ewell Hendricks

FAYETTE (2)
Delegates: Miraflor Khorshad, Saghir Mir
Alternates: Adin Timbayan

GREENBRIER VALLEY (3)
Delegates: William L. Mossburg, Robert K. Scott II, Stephan R. Thilen
Alternates: Kyle F. Fort, Thomas F. Mann

HANCOCK (3)
Delegates: Antonio Licata, Sarjit Singh, Robert Solomon
Alternates: Charles Capito, Young Lee

HARRISON (5)
Delegates: Cordell De La Pena, Erlinda De La Pena, Charles Lefebure, Douglas E. McKinney, Saad Mossallati
Alternates: Ray Harron, M.V. Kalaycioglu, Florencia Lopez, Joseph Momen, David Waxman

KANAWHA (19)
Delegates: Nicholas Cassis Jr., Donald E. Farmer, Michael O. Fidler, R. Edward Hamrick Jr., Sherman Hatfield, Fred F. Holt, Mohammad Z. Kahn, Lester Labus, Jimmie L. Mangus, John B. Markey, John V. Merrifield, Lee L. Neilan, William G. Sale III, Joseph T. Skaggs, Beth L. Spangler, F. Thomas Sporck, Ronald Wilkinson
Alternates: R. David Allara, Steven A. Artz, Spencer L. Bivens, Clinton A. Briley Jr., Richard A. Capito, Graciano E. Cendana Jr., Shawn A. Chillag, Ronald E. Cordell, Larry D. Curnutte, Manuel P. Franco, Dominic J. Gaziano, Maria Georgiev, John M. Hartman, Theodore A. Jackson, Lewis H. McConnell, Barbara Morgan, R. Samuel Oliver Jr., Thompson E. Pearcy

LOGAN (3)
Delegates: Judith A. Brendemuehl, Thomas P. Long, Rajendra Valeiveti
Alternates: Raymond O. Rushden, Rodney L. Stephens

MARION (3)
Delegates: Joedy Daristotle, John A. Leon
Alternates: Names not submitted

MARSHALL (3)
Delegates: Kenneth J. Allen, Thomas O. Dickey Jr., Jesus T. Ho
Alternates: Names not submitted

MASON (2) Names not submitted

MCDOWELL (2)
Delegates: Alexander Herland, Charles E. Michaelis
Alternates: Names not submitted

MERCER (3)
Delegates: Generoso Duremedes, John J. Mahood, Theodore Werblin
Alternates: Names not submitted

MONONGALIA (17)
Delegates: Robert M. D'Alessandri, Anthony G. DiBartolomeo, John C. Frich Jr., Douglas D. Glover, Robert A. Gustafson, James D. Helsley, Howard Kaufman, Richard S. Kerr, Roger E. King, Paul F. Malone, R. John Pearson, V. K. Raju, Joseph J. Renn III, Stephen L. Sebert, Jeffrey Stead, Wade B. Stoughton
Alternates: James G. Arbogast, Mario C. Battigelli, James E. Brick, John Brick, Richard K. Dattola, Charles M. Davis Jr., R. Wesley Farr, Ludwig Gutman, William L. Hall II, Paul J. Jakubec, Stanley J. Kandzari, Hugh A. Lindsay, David Z. Morgan, David Z. Myerberg, T. Glenn Pait, James M. Stevenson

OHIO (9)
Delegates: Robert B. Altmeyer, Dennis L. Burech, Terry L. Elliott, John D. Holloway, Robert A. Lewine, Steven C. Miller, Dennis R. Niess, Martin D. Reiter, William D. Strauch
Alternates: Stephen D. Ward, Harry S. Weeks Jr.

PARKERSBURG ACADEMY (7)
Delegates: David W. Avery, John Beane, Humberto Escandon, E. Samuel Guy, Dennis Mlot, Harry Shannon, Rutherford C. Sims
Alternates: Gary Miller

POTOMAC VALLEY (2)
Delegates: Paul T. Healy, Carl A. Liebig
Alternates: Names not submitted

PRESTON (2)
Delegates: Paul A. Getty
Alternates: Names not submitted

PUTNAM (2) Names not submitted

RALEIGH (7)
Delegates: Lamberto C. Maramba, Ahmed D. Faheem, Prospero B. Gogo, Wallace D. Johnson Jr., Iligino F. Salon, William A. Scaring, Rajnikant C. Shah
Alternates: M. Jamil Ahmed, C. Richard Daniel Jr., Lewis N. Fox, Ramon C. Jereza, Husam M. Nazer, Norman L. Siegel, Norman W. Taylor

SOUTH BRANCH VALLEY (2)
Delegates: Larry C. Rogers, David L. Whetsell
Alternates: Names not submitted

SUMMERS (2) Names not submitted

TUG VALLEY (2)
Delegates: Rano S. Bofill, Theodore Cherukuri
Alternates: Liberty R. Tablante

TYGARTS VALLEY (3)
Delegates: Elvin G. Kreider, Samuel M. Santibanez, Michael M. Stump
Alternates: Karl J. Myers Jr., Mary E. Myers, Nityananda Santra

WESTERN (2)
Delegates: Ali H. Morad
Alternates: Names not submitted

WETZEL (2) Names not submitted

WYOMING (2) Names not submitted

West Virginia State Medical Association Auxiliary

68th Annual Meeting
August 19-22, 1992
The Greenbrier, White Sulphur Springs, W.Va.
Convention Program

Wednesday, August 19

1:00 - 5:00 Registration - Main Lobby*

3:00 - 5:00 Pre-Convention Board Meeting

Mrs. Robert Altmeyer, President, presiding, Fillmore Room

6:30 - 7:30 WVSMA Presidential Reception
Taft Foyer

Thursday, August 20

8:30 - 3:00 Registration - Main Lobby

9:30 - noon WVSMA Auxiliary House of Delegates

Mrs. Robert Altmeyer, President, presiding, Fillmore Room

Invocation - Mrs. Gus Mouhas, Parliamentarian

Pledge of Allegiance - Mrs. William Scaring, Recording Secretary

Pledge of Loyalty - Mrs. Iligino Salon, President-Elect

In Memorium - Mrs. James Bryant, Chairman, Necrology

Introductions: Honored Guests and Past State Presidents

John Clowe, M.D., AMA President

Constantino Y. Amores, M.D., WVSMA President

George Rider, WVSMA Executive Director

Introduction of 1992 Convention Committee, Mrs. Harry Weeks, Convention Chairman

Roll Call of Delegates - Mrs. William Scaring, Recording Secretary

Credentials and Registration/Convention Rules of Order and Program, Mrs. Harry Weeks, Convention Chairman

Report of the 1991 Convention Reading Committee, Mrs. William Scaring, Recording Secretary

Treasurer's Report - Mrs. Harvey Reisenweber

Officers and Committee Chairmen's Reports

Regional Directors' Presentations
Southeastern - Mrs. David Bell
Northeastern - Mrs. Michael Stump
Southwestern - Mrs. Rano Bofill
Northwestern - Mrs. Roberto Cunanan

County Presidents' Reports

Pre-Convention Board Meeting Recommendations

Other Business

Appointment of Tellers

Election of the 1992 Nominating Committee

Remarks - Mrs. Robert Altmeyer

Introduction of the Speaker - Mrs. T. Keith Edwards

President's Address - Mrs. S. Bruce Gerber, AMAA President

Announcements

Adjournment

1:30 Tennis Tournament - Mrs. William Scaring, Chairman

2:00 Putting Tournament - Mrs. Harry Weeks, Chairman

6:30 - 7:30 Reception, Hosted by CNA Insurance Companies and McDonough Caperton Insurance Group
Colonial Terrace

9:00 - 11:00 Ballroom Dance Lessons
Colonial Hall

Friday, August 21

8:00 Past Presidents' Breakfast
Washington Room

8:30 - 11:00 Registration - Main Lobby

9:00 - noon WVSMA Auxiliary House of Delegates

Mrs. Robert Altmeyer, President, presiding, Fillmore Room

Introduction of Honored Guests and Past Presidents

Roll Call of Delegates - Mrs. William Scaring, Recording Secretary

Report of the Convention Credentials and Registration Committee - Mrs. Harry Weeks, Convention Chairman

Report of Press and Publicity - Mrs. Ramon Fagundo, Chairman

Recognition of Medical School Grants - Robert D'Alessandri, M.D., Dean WVU School of Medicine; Charles H. McKown Jr., M.D., Dean, Marshall University School of Medicine

Presentation of AMA-ERF Awards - Mrs. Terry Elliott, Chairman

Presentation of Membership Awards - Mrs. Iligino Salon, President-Elect and Chairman of Membership

Auxilian and Auxiliary Award - Mrs. T. Keith Edwards, Awards Chairman

Southern Medical Association Auxiliary/Doctors Day Awards - Mrs. Paul E. Gordon, SMAA Councilor

Introduction of Speaker - Mrs. Paul E. Gordon

Address - Mrs. William B. Shelton Jr., SMAA President

New Business

Report of the Tellers

Report of the 1992 Nominating Committee - Mrs. C. Vincent Townsend, Immediate Past President

Election of Officers

Installation of Officers - Mrs. S. Bruce Gerber, AMAA President

Presentation of President's Pin and Gavel - Mrs. Robert Altmeyer, President

Presentation of Past President's Pin and Gavel - Mrs. C. Vincent Townsend, Immediate Past President

Inaugural Address - Mrs. Iligino Salon

Announcements

Adjournment

12:30	President's Luncheon Crystal Room
2:00	Bridge Tournament - Mrs. Harvey Reisenweber, Chairman
8:00 - midnight	Formal Ball with Fashion Show featuring the Bo Thorpe Orchestra, Colonial Hall

Saturday, August 22

9:00 - noon	Post Convention Board Meeting Fillmore Room
6:30 - 7:30	Reception Honoring Newly Installed Officers of WVSMA and Auxiliary, Hosted by Raleigh County Medical Society and Raleigh General Hospital, Chesapeake Bay and Terrace

*Everyone must be registered to participate in the business sessions and recreational activities.

1992 WVSMA Annual Meeting Exhibitors

ADVACARE, INC.
Steve Carey, Vicky Cawley, Jim Larsen

ALL ORTHOPEDIC APPLIANCES
Hershel Hall, Lee Rosencrance

ALLEN & HANBURYS
Tom Keeney

AMERICAN LUNG ASSOCIATION OF WV
John Carlson, Cynthia "Cinny" Kittle,
Ginny Painter

APPALACHIAN REGIONAL HEALTH CARE
Greg Davis, Lori Hawkins, Gary Smock

BASEL PHARMACEUTICALS AND GEIGY PHARMACEUTICALS
Mark Miller, Robin Rose

BRISTOL LABORATORIES
Pamela S. Noor, Jose B. Testa

CAMDEN-CLARK MEMORIAL HOSPITAL
Beverly Walkup, Julie Winans

CENTRE FOR ORGAN RECOVERY AND EDUCATION
Jan Aston, Alana Powers

CERENEX PHARMACEUTICALS
Francis Brak-Myer, Stu Sergent

CIBA PHARMACEUTICALS
James A. Adkins, Robin Minter

CNA INSURANCE COMPANIES AND MCDONOUGH CAPERTON INSURANCE GROUP
Julie Ayers, Sarah Dore, Tamara Lively, Michele Sull

CHARLESTON AREA MEDICAL CENTER
William B. Ferrell, Melissa C. Long,
Vicki L. Murray

CREATIVE COMPUTING CONCEPTS
Rob Cobb, Michael Pratt, Marti Riggall

DISABILITY DETERMINATION SECTION
Rae Burdette

E. R. SQUIBB
Bob Bittner, Joe Oliverio

FAMILY MEDICINE FOUNDATION OF WV
Chris Ferrell, Robert D. Hess, M.D.,
Thomas P. Long, M.D.

GLAXO CORPORATE SALES
Lee Braenovich, Gary Browning, Kendra Egnor,
David Linkous, Mark Smith

GLAXO PHARMACEUTICALS
Debbie Kemp, John Thomas

KNOLL PHARMACEUTICALS
Charles Poff

MARION MERRELL DOW, INC.
Jeff Ball, Paula Goode, Sarah Justice

MU SCHOOL OF MEDICINE
Beth Lynn Hunt, Gay Jackson

MCDONOUGH CAPERTON INSURANCE GROUP (BENEFITS)
Margaret Ann Hartman, Brusanna Jackson,
Tim Mitchell, Mary Bowman Telfer

MEAD JOHNSON PHARMACEUTICALS
Steven E. Long, Joseph H. Staley

MERCK & CO., INC.
Harold Ashworth

MERRILL LYNCH
Hal L. Darnold, John Wilshire

METPATH
Debbie Niday, Evette Sheppard

MILES DIAGNOSTICS
Alvin G. Chesson, Bob Kidd, Ralph Palermo

MOUNTAINSIDE SOFTWARE, INC.
Doug Sensabaugh, Wendy Zahn

NEUROLOGICAL INJURY PREVENTION PROGRAM OF WV
T. Glenn Pait, M.D.

NORTH COAST HEALTH CARE MGT.
Mark Rose, Paul Scott

PFIZER LABORATORIES
Allan deBonata, Debbie Hon, Jerry VanStavern

P.I.E. MUTUAL INSURANCE CO.
Jerry Opgenorth, Monty Zimmerman

RHONE-POULENC RORER
Jeff Bumgardner, Mark Francis, Lynn Miller

ROCHE LABORATORIES
Ed Davis, Pete Francesa, Cheri Freeman

ROSS LABORATORIES
Norman Craig, Dean Fliotsos, Phil Pini

SCHERING CORPORATION
Kim Mahokey, Joseph Sassler

SEARLE PHARMACEUTICALS
Susan Callison, Natalie Egnor, Mike George,
Cecilia Lynch, George McKnight

SMITHKLINE BEECHAM PHARMACEUTICALS
Robert Bucina, Gina Piso, Doug Wallace,
Stephen Ward

SPECTRUM EMERGENCY CARE
Cathy Long

U.S. AIR FORCE
Larry P. Howell, Scott Long

U.S. ARMY MEDICAL DEPARTMENT
Major Brian Friedman, Captain Robert LeDoux

U.S. NAVY
LT. Charles T. Pullen, LCDR Bruce Vansickle

UPJOHN COMPANY (THE)
George A. McClain, Norm Scarazzo

WV BUREAU OF PUBLIC HEALTH
Joyce Edwards, Ann Marie Grimm, Sharon Lansdale,
Cathy Lee, Joseph P. Schock,
Joe Wyatt, Joyce Zinn

WVSMA/WEST VIRGINIA MEDICAL JOURNAL
WVSMA Staff and Officers

**WV ACADEMY OF OTOLARYNGOLOGY–
HEAD AND NECK SURGERY**
"Through with Chew Program"
F. Thomas Sporck, M.D.

WVU SCHOOL OF MEDICINE
Kari Long

WHITBY PHARMACEUTICALS, INC
Chris Gaston, Melissa Nary, Tim Pergram

WYETH-AYERST/A.H. ROBINS
Donald Adams, Anthony Angeli Jr.

WYETH-AYERST LABORATORIES
Kathy Ballard

THANKS!!

A special word of appreciation goes to the following firms who have contributed educational grants or other support for this year's WVSMA Annual Meeting. The support given by these organizations makes possible the educational emphasis of the meeting:

The Chapman Printing Company
CNA Insurance Companies
Glaxo Pharmaceuticals
The Greenbrier Hotel
Marshall University School of Medicine
McDonough Caperton Insurance Group
MCV Alumni Association
P.I.E. Mutual Insurance Company
Roche Laboratories
Sandoz Pharmaceuticals
West Virginia University Alumni Association
West Virginia University School of Medicine
Wyeth Ayerst/A.H. Robins Company

"We must make sure that policies are based on facts, not fears."

Dr. Paul Volberding, Researcher, University of California, San Francisco, Member, American Medical Association

Amid the rancor of politics and budget debates, the needs of the patient are often overlooked. And, it is forgotten that it is physicians who know the most about disease and the suffering of patients.

Nowhere is this more true than with AIDS.

"Throughout the history of epidemics, there has been the possibility of reactions and policy based on fear and stigma," states Dr. Volberding.

The American Medical Association (AMA) agrees. The AMA is committed to fair AIDS policies, and to supporting researchers battling not just AIDS, but the countless diseases that ravage our society.

"What impresses me most about the AMA is its willingness to take public policy positions and its ability to influence opinion," Dr. Volberding adds.

You are invited to join Dr. Volberding and to join with him in his efforts to bring quality health care to those in need. Become a member of the American Medical Association today.

Members of the AMA are encouraged to join their state, county and specialty societies.

American Medical Association

Physicians dedicated to the health of America

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All of us are concerned about our future. Therefore we work, we save, we do what we can to make our future bright and secure.

Our wildlife can't do that--so we must do it for them--and for us. The best way to ensure the future of all wildlife in West Virginia is to make a tax-deductible donation to the West Virginia Wildlife Endowment Fund. The interest from the protected principal will be used solely for the sound management of all wildlife in West Virginia.

Invest now and help us build our nest egg for the future. Help secure and protect unique areas and vital habitat right here in West Virginia. Be proud with the knowledge that your investment may support such programs as the reintroduction of the osprey and peregrine falcon to our skies. Your gift to our little nest egg will hatch dividends for many generations to come.

For More Information Contact:
Marshall Snedegar
WEST VIRGINIA WILDLIFE
ENDOWMENT FUND
Building 3, Room 821, State Capitol
Charleston, WV 25305
Telephone (304) 348-2771

WEST VIRGINIA WILDLIFE ENDOWMENT FUND

Department of Health & Human Resources

Bureau of Public Health News

This page of material is submitted and paid for by the Bureau of Public Health.

Provisional statistics released for 1991

Heart disease and all types of cancers continue to be the top two killers of West Virginians, and the state's mortality rate of 10.8 deaths per 1,000 residents continues to rank higher than the nation's.

These figures are according to the 1991 Provisional Statistics Report recently released by the Bureau's Office of Epidemiology and Health Promotion. The report lists such information as the number of births, deaths, marriages and divorces, as well as other health-related statistics for the state in the year 1991.

During 1991 there was a decrease in the birth rate, an increase in the death rate, fewer marriages and more divorces. Heart disease accounted for 35.2 percent of all West Virginia deaths, while malignant neoplasms caused 23.4 percent of the deaths. Other leading causes of death included cerebrovascular disease (6.2 percent), chronic obstructive pulmonary disease and allied conditions (5.2 percent), accidents (4.4 percent), pneumonia and influenza (3.5 percent), diabetes mellitus (2.6 percent) and suicide (1.2 percent).

For a copy of the report or for more information, contact the Health Statistics Center at 558-9100.

Infant mortality rate drops to all-time low

According to the 1991 Provisional Statistics Report, West Virginia's infant mortality rate dropped to its lowest level ever last year.

In 1991, 175 West Virginia infants died before their first birthday, compared to 222 deaths in 1990. The infant mortality rate, or number of deaths per 1,000 live births was 8.1 in 1991, compared to 9.8 in 1990. The 1988 rate of 9.0 had been the previous low. The national infant mortality rate was 8.9 in 1991.

The leading causes of infant deaths were perinatal conditions, birth defects and Sudden Infant Death Syndrome. The Bureau of Public Health has a number of programs to improve obstetrical and infant care, thereby reducing the risks of these conditions.

For more information on the infant mortality rate or the Bureau programs, contact Cathy Lee at 558-2971.

Camp for children with spina bifida offers variety of activities

The annual Mountaineer Spina Bifida Camp for children was held June 14-21 at Cedar Lakes FFA/FHA campground. Fifty-three children attended the camp this year, many of them staying away from home for the first time.

The camp was first held in the spring of 1985 with 14 children. Since then, it has continued growing, giving participants the opportunity to take part in such activities as swimming, boating, fishing and craft making. Camp activities are planned to encourage independence, enhance self-esteem and improve socialization.

The camp is funded solely with private funds, but each year staff members from the Bureau's Office of Maternal and Child Health and Handicapped Children's Services donate their time and talents. Many of them process camper applications and mail out information about the camp, while others actually attend the camp as counselors, nursing staff and craft instructors. Throughout the year, staff from Children's Services participate in planning and logistical meetings, as well as fund raising and grant writing to make the camp a reality.

For more details about the camp or Handicapped Children's Services, call Nancy Dunst at 558-3071.

Nurses compiling data on HIV/AIDS cases in West Virginia

The Bureau of Public Health Division of Surveillance and Disease Control has hired three registered nurses to gather data on HIV infection and AIDS in West Virginia.

West Virginia State Law (Legislative Rules 64-7, 1991 West Virginia Code Chapter 16-3c) requires the diagnosis of AIDS and positive HIV test results be reported to the Bureau.

Joyce Zinn, R.N., B.S.N., and Ann Marie Grimm, R.N., B.S.N., are conducting active HIV/AIDs surveillance by contacting physicians in primary care settings who may care for individuals with HIV infection and/or AIDS. Mary Morris, R.N., B.S.N., is coordinator of the HIV serosurveillance surveys conducted in cooperation with the Centers for Disease Control.

If you have any questions concerning HIV/AIDS reporting or HIV serosurveillance, contact the Division of Surveillance and Disease Control at 1-800-423-1271 or 558-2987.

State HIV consortia enters second year

The West Virginia HIV Consortia began its second year of operation in July. The consortia is supported by the Bureau's AIDS Program through a federally-funded contract.

Two case managers run the statewide program, which attempts to provide HIV infected individuals access to health care and support services. During the first nine months of operation, consortia funds helped provide diagnostic services, ongoing medical care, dental care, housing, transportation and nutritional services for 80 males and 12 females.

For more information about referrals and eligibility, contact Jay Adams at 232-6295.

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WEST VIRGINIA UNIVERSITY HEALTH SCIENCES CENTER

Compiled from material furnished by the West Virginia University Health Sciences Center, Communications Division, Morgantown.

Kaufman reappointed to FDA panel

Dr. Howard Kaufman

Dr. Howard Kaufman, chair of the Department of Neurosurgery, has been chosen to serve a second term on the Food and Drug Administration's neurosurgical devices panel.

Dr. Kaufman currently heads the National Neurosurgical Committee on Technology Assessment and also sits on the DATTA panel of the AMA. Additionally, he was recently elected president of the West Virginia Neurosurgical Society.

State's first residency in neuropathology to be offered at WVU

The Neuropathology Division's application for a neuropathology residency program has been approved by the Accreditation Council for Graduate Medical Education.

The Neuropathology Division is under the direction of Dr. Sydney S. Schochet and this new training program is the only one of its kind in the state.

New faculty named

The new clinical and basic sciences faculty members at the two campuses of the WVU Health Sciences Center are as follows:

Morgantown Division

Anesthesiology — Dr. John J. Barbaccia, assistant professor; Dr. David A. Rosen, associate professor; Dr. Kathleen R. Rosen, adjunct associate professor; Dr. David M. Smith, assistant professor; Dr. Daniel Sullivan, adjunct professor (part-time); Dr. Jerry Tarver, instructor; and Dr. Ronald Wargacki, assistant professor.

Behavioral Medicine and Psychiatry — Lydia D. McLarnon, Ph.D., assistant professor; and Robert Edmundson, M.S.W., assistant professor.

Biochemistry — Lisa Salati, Ph.D., assistant professor; and F. Bradley Hillgartner, Ph.D., assistant professor.

Family Medicine — Dr. D. Michael Kinney, assistant professor; and Dr. Dorian J. Williams, assistant professor.

Department of Medicine

Cardiology — Dr. Harvinder Singh, instructor.

Gastroenterology — Dr. Parth S. Bharill, instructor.

General Internal Medicine — Dr. Karen Clark, instructor; Dr. Jeff Jackson, instructor; and Dr. Maria Kolar, assistant professor.

Hematology/Oncology — Dr. Joseph P. Lynch, assistant professor.

Nephrology — Dr. P. Gayle Patterson, assistant professor; and Dr. Nangali Srinivasa, assistant professor.

Pulmonary and Critical Care Medicine — Dr. David Weissman, associate professor.

Rheumatology — Dr. Jo Ann Allen, assistant professor.

Microbiology and Immunology — Daniel C. Flynn, Ph.D., assistant professor; Wei-Shau Hu, Ph.D., assistant professor; Christopher Cuff, Ph.D., assistant professor; and Rosana Shafer, Ph.D., research instructor.

Obstetrics and Gynecology — Dr. Thomas F. Harman, assistant professor; Patricia Harman, C.N.M., assistant professor; and Dr. Loraine Tyre, clinical assistant professor.

Occupational and Environmental Health — Dr. Alan Ducatman, professor.

Ophthalmology — Dr. Christina Flaxel, instructor/fellow; and Dr. Susan Tucker, instructor/fellow.

Orthopedic Surgery — Dr. R. David Bauer, assistant professor; Dr. William Post, assistant professor; and Dr. Jaiyoung Ryu, associate professor.

Otolaryngology — Albert S. Berrebi, Ph.D., assistant professor.

Department of Pediatrics

Pediatrics — Dr. Angela Rosas, assistant professor, ambulatory pediatrics; Dr. J. Fernando Rosas, assistant professor, rural health; and Dr. Nevin Wilson, assistant professor, allergy.

University Health Service — Dr. Randolph Pifer, assistant professor.

Radiology — Dr. Mathis Frick, professor and chair; Dr. Stephen Elksnis, assistant professor; Dr. James Mergelas, assistant professor; Dr. Orlando Ortiz, assistant professor; and Dr. Judith Schreiman, professor and vice chair.

Department of Surgery

Pediatrics — Ellen Hrabovsky, professor

Thoracic — Dr. Alexander Vasilakis, instructor.

Emergency Medicine — Dr. Linda Allison, assistant professor; and Dr. Janet Williams, assistant professor.

Charleston Division

Family Medicine — Dr. Michael Dewitt, assistant professor; and Dr. Leo Gibson, assistant professor.

Medicine — Dr. James F. O'Neal, assistant professor.

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Marshall University School of Medicine

Compiled from material furnished by the Office of University Relations, Marshall University, Huntington.

Study indicates most MU medical graduates locate in rural areas

Recently released statistics show that the 1991 graduates of the Marshall University School of Medicine are more likely to practice in smaller and socioeconomically-deprived areas than their counterparts.

Dr. Patrick I. Brown, associate dean for academic and student affairs, said the results are consistent with those of previous years. "Certainly you must interpret statistics carefully when you are dealing with a class size of fewer than 50 students, but the pattern here is unmistakable," Dr. Brown said. "Marshall graduates are clearly more likely to enter the most-needed primary care fields in the small and economically-deprived areas that so desperately need them."

According to data gathered by the Association of American Medical Colleges, Marshall graduates are three times more likely to practice in towns with populations of 2,500 to 10,000 (9.5 percent vs. 2.9 percent nationally), and nearly twice as likely to practice in non-suburban cities of 10,000 to 50,000 people (16.7 percent vs. 8.5 percent). In addition, Marshall graduates indicated that they plan to establish in rural areas considered to be socioeconomically deprived (16.7 percent vs. 9.5 percent).

Other statistics showed Marshall graduates were nearly 2.5 times more likely to have received rural training (97.6 percent vs. 40.4 percent) and more than twice as likely to enter the specialty of family practice (23.8 percent vs. 10.3 percent). They were also above the national average in choosing electives in the fields of family medicine, pediatrics, and obstetrics/gynecology.

Life article describes MU professor's Amazon exploration

Life magazine featured an article in its July issue about Dr. John Walden and his recent trip to the Brazilian rain forest to study environmental changes over a 78-year period.

Dr. Walden participated in the journey as part of a six-month sabbatical. The expedition retraced the remote Rio Roosevelt, first explored by Theodore Roosevelt in 1914. The 1992 trip was designed to document environmental changes which occurred.

"The trip helped us establish a large number of contacts in Brazil on Marshall's behalf so that we have the opportunity for students and faculty — not just from the medical school but from the entire university — to visit and become involved in some very interesting and exciting work in the Amazon basin region," Dr. Walden said.

Dr. Walden said that Life bypassed the opportunity to contrast the 1914 and 1992 expeditions, and instead, focused on the trip's physical drama. "I think anyone reading the article would think danger was lurking around every bend, and that just was not so," he said. "I think it was particularly unfortunate that the article left the impression that Indians were lurking in the brush, possibly with malicious intent. The Indians we traveled with and encountered were delightful people."

As part of his sabbatical, Dr. Walden completed the writing of a textbook on the clinical parasitology of Ecuador and a book on the practical aspects of jungle trekking. In addition to developing contacts to expedite future visits from Marshall students and faculty, he also worked with two residents conducting research in Ecuador to fulfill their requirements in the international medicine track of Marshall's family medicine residency program.

Walker named chairman of Pathology Department

Dr. Ernest M. Walker has been appointed chairman of pathology for the School of Medicine.

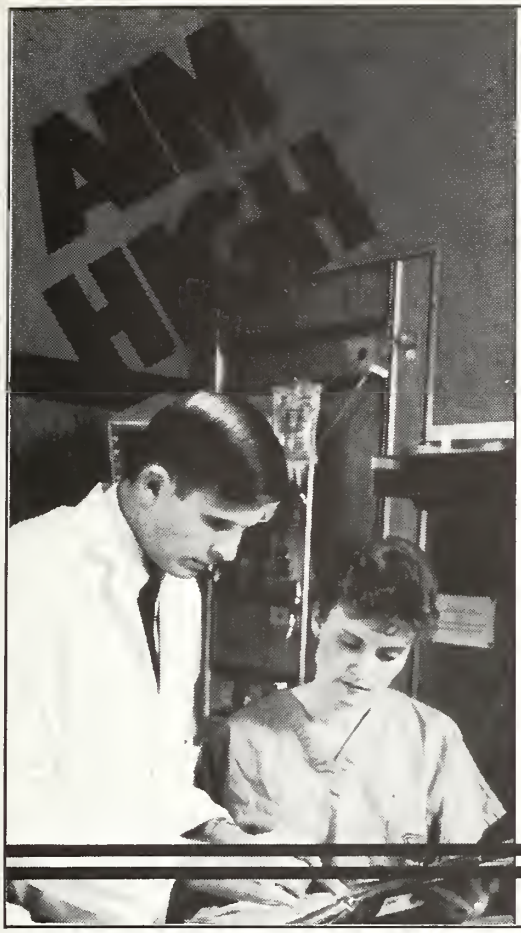
Dr. Walker previously worked as a professor of pathology for the University of Arkansas for Medical Sciences. He was also director of clinical laboratories for the John L. McClellan VA Medical Center and assistant medical director for the Little Rock American Red Cross Blood Center. Prior to these positions, Dr. Walker served on the faculty of the Medical University of South Carolina.

"Dr. Walker is an ideal person to lead our pathology program, which is such a key transitional area for medical students," Dr. McKown said. "He has both a Ph.D. in biochemistry and an M.D. in pathology. His broad background will serve us well in medical education and in providing new clinical services to the VA Medical Center as its programs expand."

Dr. Walker is pursuing research in two fields: establishing models to evaluate new drugs for infectious diseases (particularly those associated with AIDS), and evaluating chelating agents to treat poisoning from heavy metals. He was involved in some of the nation's earliest successes in developing apheresis techniques to protect the unborn children of women with sickle cell disease.

A past president of the Association of Clinical Scientists, Dr. Walker is also a member of the College of American Pathologists and the American Association of Pathologists. He formerly served as the Arkansas state commissioner on laboratory accreditation for the College of American Pathologists.

Dr. Walker was named Sunderman Clinical Scientist of the Year in 1991 by the Association of Clinical Scientists in Jacksonville, Fla.



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Medical Student News

I am pleased that this month's page has been devoted for the first time to case studies which were submitted by medical students. I want to encourage other medical students who would like to submit a case study to do so at any time.

If you would like to write a case study or any other type of article for this page, please contact Nancy Hill, managing editor of the West Virginia Medical Journal, at 925-0342.

Kevin Kaufman, MSIII
President, WVSMA-MSS

WVU - Morgantown

A patient was recently brought to the WVU Children's Hospital after having been seen at the Pediatric/ Cardiology Clinic earlier to evaluate I/VI SEM. An echocardiogram had revealed a dilated LV with a 1 cm. mural thrombus, markedly diminished function, and several other abnormalities.

I expected to see a sickly child in great distress with CHF, but instead found a happy normal-appearing, 10-month-old girl. Her cry was the only outwardly apparent abnormality. She would scream for awhile, then stop and pant to get enough breath for her next outburst.

The patient's diagnosis was dilated cardiomyopathy with a left ventricular thrombus and congestive heart failure. Her history was significant for a viral upper respiratory infection one month prior. This, along with her age, suggested a viral etiology.

Patients with a viral myocarditis typically present with acute infection and severe heart failure. Some, such as this patient, have an asymptomatic myocardial infection with a gradual CHF onset. The prognosis is fairly good if the patient survives the initial presentation, and if the etiology is viral.

We started the patient on digoxin, to augment contractility, furosemide, to decrease preload; captopril, to decrease afterload; and coumadin to prevent thrombotic expansion and embolic shedding. Such a regimen is the treatment of choice. If the patient should fail to respond, cardiac transplantation will be indicated.

It is hard to believe that a 10-month-old little girl could have such a serious and life-threatening disorder. But, her situation is not much different from that of many of the children we've seen this past month.

While our lives have been consumed with the boards and surviving our first rotation, this child, and those like her, are concerned about just surviving.

Lyn Nuse, MSIII

WVU - Charleston

A 54-year-old white male was admitted to CAMC, Memorial Division, on June 30 with a 10-day history of progressively worsening fever, chills, malaise, and a discrete petechial rash on his abdomen. Laboratory and radiologic studies were inconclusive and the patient was started empirically on antibiotics.

The next day, as the rash progressed in distribution, history of a tick bite was elicited from the patient. He was then treated with erythromycin based on clinical suspicion of Rocky Mountain Spotted Fever (RMSF), later confirmed by serologic evaluation. Since erythromycin, the drug of choice for RMSF is not typical empiric antibiotic therapy, the history of a tick bite proved invaluable in halting the progression of a disease that carries significant morbidity and mortality risk. The rash may present late or may not present at all, but a recent study showed 88% of RMSF patients specifically remembered a preceding tick bite.

Any patient with fever of unknown origin, especially between April and September in endemic areas such as West Virginia, should be asked about tick exposure.

Brad Brautigan, MSIII

Marshall University

The resident was following a new patient admitted for N/V, lower abdominal pain, and swelling of both hands. The patient was also 19 weeks pregnant. The diagnosis - Hereditary Angioedema (HAE) and 19 weeks gestation.

The first question to the medical students was - who remembers what HAE is? The attending waited. The resident reminded us that HAE is an inherited deficiency (quantitative) of Cl esterase inhibitor - which results in an uncontrolled activation of early complement proteins.

Patients have recurrent attacks which may be set off by stress or trauma. Signs/symptoms include peripheral edema, abdominal pain (GI mucosal swelling), facial edema and potentially fatal pharyngeal edema.

Patients are unresponsive to adrenaline, antihistamines, or steroids. Treatment includes giving fresh frozen plasma (FFP) which replaces exhausted as well as missing complement. FFP takes several hours to be effective and intubation may be needed in a severe attack.

Other therapies include purified Cl esterase inhibitor concentrate which is only available in Europe. This method can have recovery in 20 minutes. Long-term therapy includes Danazol/androgen derivative which increases hepatic synthesis of inhibitor.

The patient in mention has had frequent attacks, one which required FFP, and has had periods of being unable to keep anything down requiring TPN. The patient remains pregnant.

My first approach was Med-Line search which revealed the few reported cases. The Med-Line search is an important tool and potentially is underused by medical students.

Brian Magrane, MSIII

WESPAC Members

We wish to thank the following individuals for their recent contributions to WESPAC:

Physicians

Cabell

*Willard F. Daniels Jr.
*Robert Kayser
G. William Lavery
Robert J. Marshall
**Jose Ricard
*Jack R. Steel

Central

Charles Lively

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Obituaries

J. Ralph Woodford, M.D.

Dr. J. Ralph Woodford, 85, of Philippi, died May 22 in Ruby Memorial Hospital in Morgantown following an extended illness.

Dr. Woodford was born June 23, 1906, in Berryburg, W.Va. He graduated from Broaddus Academy and Broaddus College. He began his medical training at West Virginia University, then transferred to Emory University Medical School in Atlanta, where he graduated in 1934. Dr. Woodford completed his internship at Ohio Valley General Hospital and returned to Barbour County in 1935 to establish his practice as a general practitioner.

During his 43-year career, Dr. Woodford delivered more than 2,000 babies. He was a member of the Barbour-Randolph-Tucker County Medical Society, now called the Tygart's Valley Medical Society. He had been a member of the West Virginia State Medical Association since 1936 and the American Medical Association since 1953.

Before he retired in 1978, Dr. Woodford served on the West Virginia Vocational Rehabilitation Board and also acted as medical adviser to the Barbour County Selective Service Board for several years. He was a 32nd degree Mason and was also a member of Bigelow Lodge 52 A.F. and A.M. of Philippi, the Scottish Rites in Clarksburg and Wheeling, and Crim Memorial United Methodist Church.

Survivors include his wife, Frankie Harriet Woodford; two sons, Joseph S. Woodford of Englewood, Fla., and Jon Larry Woodford of Sykesville, Md.; two sisters, Mrs. Pauline Townsend of Petersburg, Fla., and Margaret Ann Hayward of Arlington, Texas; two brothers, William H. Woodford and Lester D. Woodford, both of Philippi; four grandchildren and three great-grandchildren.

Dr. Woodford was preceded in death by one son, James R. Woodford Jr.; one brother, Dr. Thomas Woodford; and two sisters.

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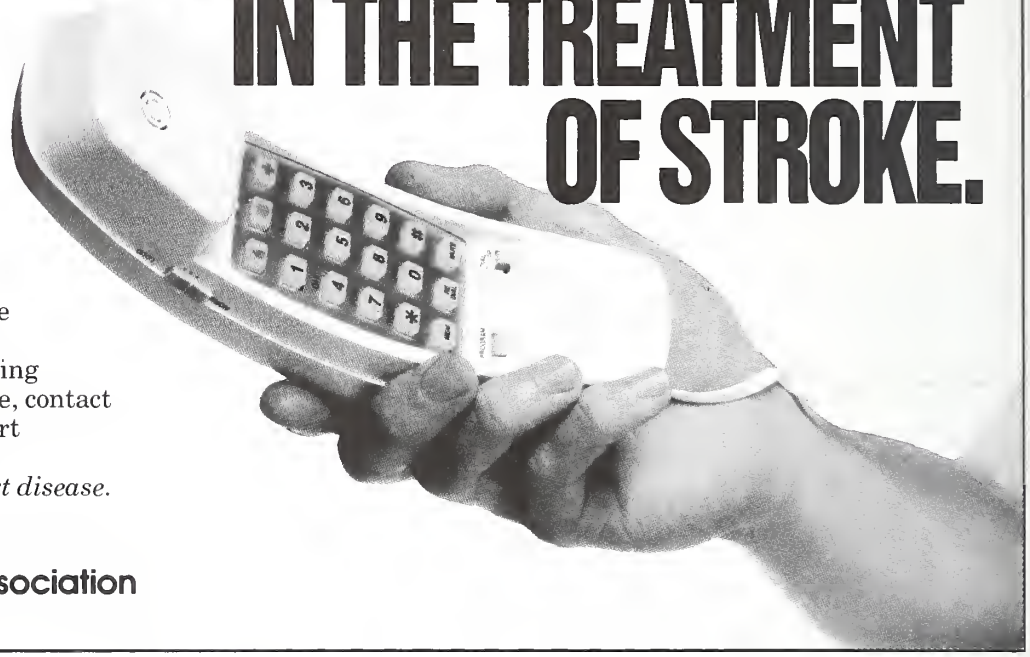

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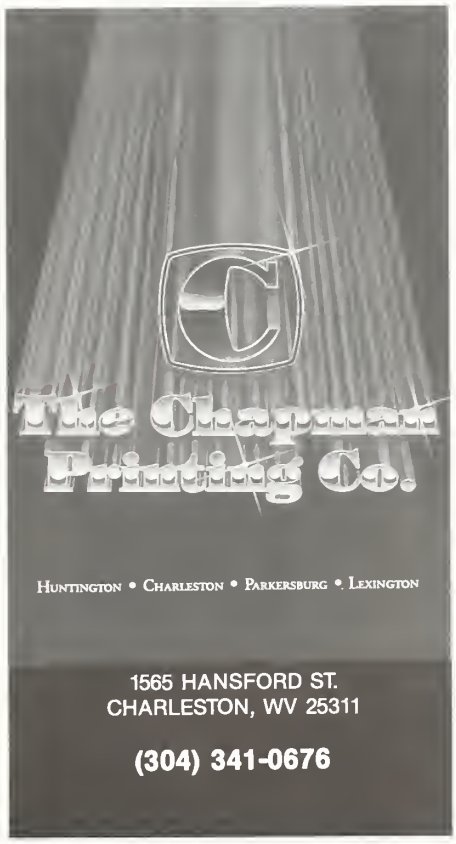

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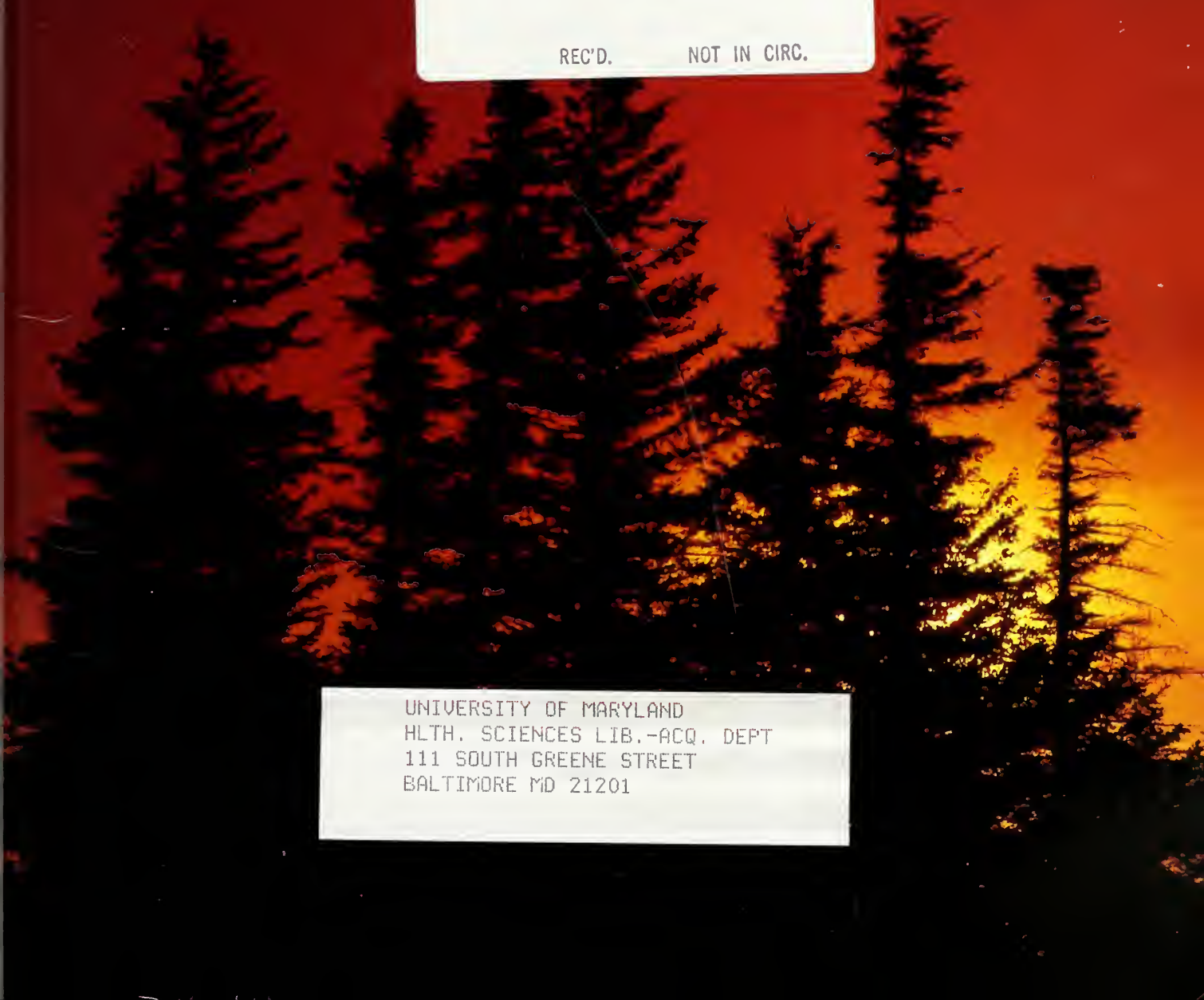

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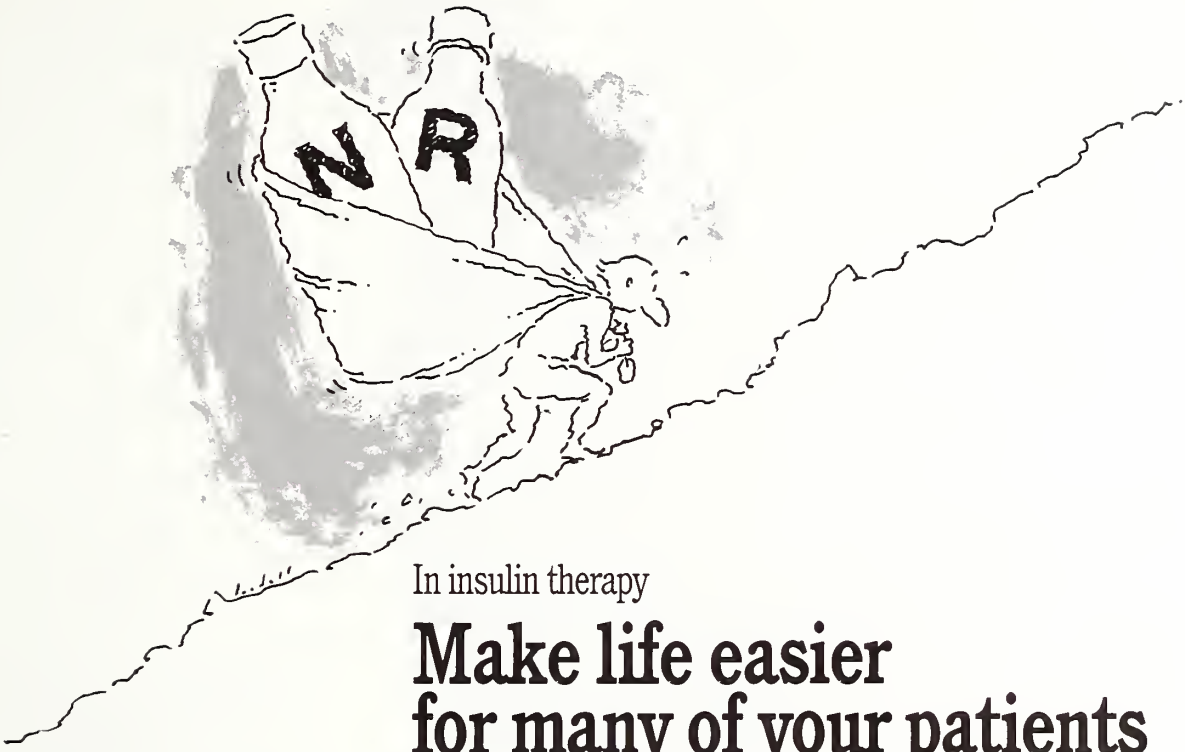

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The sunrise dawns at Dolly Sods in Tucker County. Photo courtesy of *Scott Durham* of Pineville.

Caring for hearing-impaired patients in compliance with the Americans With Disabilities Act

MICHELE GRINBERG, Esquire
Flaherty, Sensabaugh & Bonasso, Attorneys at Law, Charleston

Editor's Note: *This article was compiled from a letter which Michele Grinberg wrote to WVSMA Executive Director George Rider in response to a question he had asked her regarding the Americans With Disabilities Act. Mr. Rider requested this article be published because of the number of questions he has received from physicians concerning this subject.*

George Rider, WVSMA executive director, recently posed the question to me as to whether a physician in private practice who is presented with a possible hearing-impaired patient, who needs an interpreter in order to receive treatment, can refuse to treat such a patient unless the patient provides his/her own interpreter; and whether the doctor can do so and be in compliance with the Americans With Disabilities Act ("Act").

The first subquestion to be addressed is whether a physician's private office is a place of **public accommodation** such that physicians would be required to comply with the public accommodations section of the Act. The short answer is: **Yes.** Section 12181(7)(F) of the Act specifically includes the "professional office of a health care provider" as a place of public accommodation for purposes of the requirements of the Act. It is discrimination for a place of public accommodation (doctor's offices) to deny an individual "the full and equal enjoyment of the...services, facilities of a place of public accommodation." Sec. 12182. It is a specific violation of the Act to fail "to take such steps as may be necessary to ensure that no individual with a disability is excluded...because of the absence of auxiliary aids and services." Sec. 12182(b)(2)(A)(iii).

The following exceptions should be noted for WVSMA members: If the physician has 25 or fewer employees and gross receipts of $1,000,000.00 or less from January 26, 1992 (effective date of the Act) through July 26, 1992, he or she is not yet subject to suit for acts or omissions under the public accommodation rules. In addition, no health care provider is subject to a civil action for acts or omissions of the public accommodations rule from January 26, 1992 through January 25, 1993, if his or her business has 10 or fewer employees and gross receipts of $500,000.00 or less for the year. **As of January 26, 1993, all health care provider offices will be places of public accommodation** for purposes of the Act and subject to civil suit, as well as suits filed by the Justice Department for acts or omissions constituting discrimination against individuals on the basis of disability. WVSMA members need to understand that relying on the non-compliance exemption for small offices may mean that if a suit is brought, the member would have to disclose his or her assets to meet the proof of the exemption from compliance.

The Act was written to require a case-by-case evaluation as to what constitutes "reasonable accommodation." The language of the Act specifically contemplates that an entity need not take steps to provide reasonable accommodation which either "fundamentally alters the nature of the good, service, facility, privilege, advantage or accommodation being offered or would result in an undue burden." Sec. 12182. It cannot be said that providing an interpreter in the vast majority of physician-patient relationships would alter the nature of the service being provided. The analysis then must focus on whether providing such interpreter would constitute "an undue burden."

The Justice Department has published regulations which became effective January 26, 1992, to implement enforcement of the public accommodations rules. In analyzing whether providing auxiliary aids (such as qualified interpreters) must be provided by a place of public accommodation, the Justice Department defines an **undue burden** as one of **"significant difficulty or expense."** If providing an interpreter is a significant difficulty or expense, the regulation requires that an alternative auxiliary aid or service, if one exists, that would not result in an undue burden be provided. Included in their list of auxiliary aids and services, in addition to qualified interpreters, are: notetakers, computer-aided transcription devices, written materials, telephone handset amplifiers, assistive listening devices, assistive listening systems, telephones compatible with hearing aids,...videotext displays, large print materials, etc. 28 C.F.R. 36.303. The Justice Department provides further guidance in its regulations by specifically listing factors which should be included in analyzing whether an accommodation, in this case providing an interpreter, would be an undue burden on a physician's business. The factors to be considered include:

(1) The nature and cost of the action needed...;
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In the analysis of undue hardship, it is my opinion that the loss of profit for a physician in treating one handicapped person by providing auxiliary services, would not be enough to defend against a claim of discrimination. On the other hand, I would advise all physicians to keep records regarding the supplemental costs they are bearing to provide reasonable accommodation. Using one's best judgment, a health care provider can decide when his or her business is being unduly burdened.

One other point I wish to raise is that it is my opinion the health care provider does not need to provide the accommodation preferred by the patient. Rather, the physician is in control of what constitutes a reasonable accommodation that is not an undue hardship. If it would be more cost effective for a physician to sit down with a patient at a computer and type questions and responses to each other, I see nothing in the law or regulations which suggests to me the physician must be dependent on the recipient of services' choice of accommodation. I would caution, however, that such reasonable accommodation as chosen by the health care provider must indeed provide the recipient with the full and equal enjoyment of the service being offered and that the patient can decline an offer of accommodation.

Application of the Americans With Disabilities Act is no simple task. The Act is a piece of social engineering which, in my opinion, has a worthy goal of integrating handicapped persons fully into our society; however, Congress in an attempt to soften the financial blow for employers passed a statute which is so vague and ambiguous in many respects as to seemingly impose an unfair burden on employers. Health care providers need to understand that they can refuse to treat a patient for many lawful reasons, but they cannot refuse to treat a patient because of a handicap which requires a "reasonable accommodation."

The best defense is a good offense. I would hope the physicians in their regional or statewide meetings would discuss with each other how they might share costs, or how they have found creative solutions to solve problems arising from the provision of services to handicapped users.

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An interview with Cleve Benedict

Gubernatorial candidate Cleve Benedict addressed the participants attending the First General Session at the WVSMA's Annual Meeting in August.

Editor's Note *- Republican gubernatorial candidate Cleve Benedict discussed his views during the First General Session at the WVSMA's 125th Annual Meeting in August. Prior to his speech, Benedict spoke with Michelle Young, the WVSMA's public relations/advertising manager.*

What proposal do you favor to address the state's health care crisis?

I am very concerned about the heavy involvement of government in administering a statewide program and question its ability to do that well.

We need to help people make choices for themselves rather than have government make all the decisions in determining who gets what type of care.

Traditionally, patients and physicians made these decisions and now it is being proposed to take it out of their hands and into some agency in Charleston. Whatever plan is chosen, I hope it will be physician directed.

"Traditionally, patients and physicians made these decisions and now it is being proposed to take it out of their hands and into some agency in Charleston."

The individual's ability to pay should not be a factor in the quality of care he or she receives. Everyone is entitled to "Cadillac" health care.

Tort reform is necessary for our physicians. I believe a screening process should be required. A panel made up of physicians, consumers, judges and others should be established to review each case and recommend appropriate disposition.

State government employees who have PEIA insurance should pay higher premiums if they smoke or are not within healthy weight limits because they are much more likely to develop health problems, such as lung cancer and heart disease. This would encourage more people to maintain healthy lifestyles.

How do you think malpractice claims should be handled?

Large payments for malpractice claims should not be made in one lump sum, but instead, extended over the individual's lifetime.

I would propose incorporating the Homestead Exemption which would require physicians or landowners to carry a minimum level of liability insurance and would ensure that their homes and core assets would not be at stake. Physicians should be able to protect their families and ensure that their homes and farms are not at risk to be taken as a result of a malpractice suit.

What other changes would you initiate if you were elected governor?

I would eliminate the seven super secretary positions. They only serve as a buffer between the governor and those who provide the day to day government services. I prefer working one-on-one with department heads and employees.

To promote good economic development, I advocate reducing the consumer sales tax from six percent to three.

Decisions about the education curriculum should be made at the local level. We need to steer away from a Charleston-dominated education system and allow each community to decide and administer its own educational programs.

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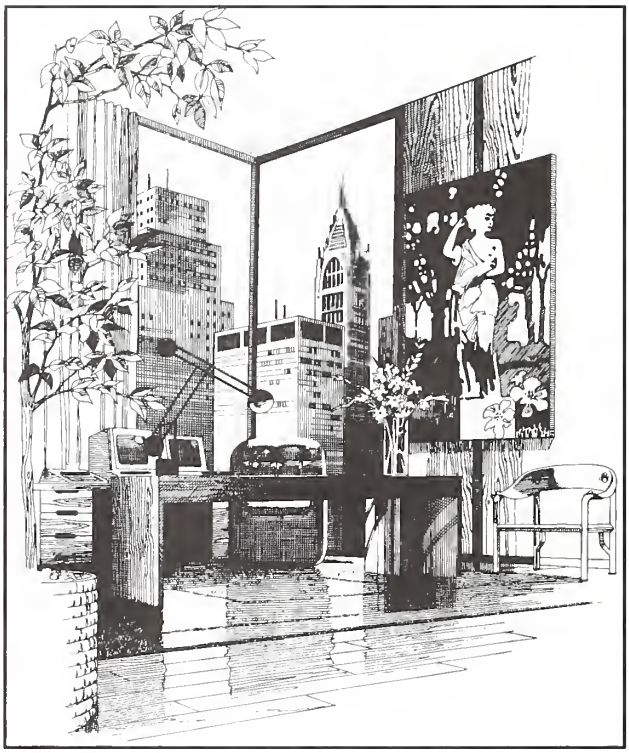

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The Breast Cancer Prevention Trial (BCPT) in West Virginia

STEVEN J. JUBELIRER, M.D., F.A.C.P.
Director, Cancer Care Center of Southern West Virginia, Charleston Area Medical Center; and Clinical Professor of Medicine, West Virginia University, Charleston Division
EDWARD B. CROWELL, M.D. F.A.C.P.
Associate Professor of Medicine, Hematology/Oncology, West Virginia University Health Sciences Center, Morgantown

Abstract

Female breast cancer is a major medical problem with significant public health ramifications. During the next decade, more than 1.5 million women in the United States will be newly diagnosed with invasive breast cancer. The Breast Cancer Prevention Trial (BCPT) is an NIH-sponsored study which will determine whether long-term tamoxifen therapy is effective in:

1) Preventing invasive breast cancer,
2) Lowering the incidence of fatal and nonfatal myocardial infarction, and
3) Reducing the incidence of bone fractures. Sixteen thousand women, including at least 100 from West Virginia who are ≥ 35 years of age at increased risk for breast cancer, will be randomized between placebo and tamoxifen during a two-year period. For each participant, the annual and lifetime probability of developing breast cancer will be estimated utilizing a computerized model of risk assessment. The placebo or tamoxifen will be administered for at least five years. Toxicity, compliance, monitoring of quality-of-life assessment, and lipid and lipoprotein evaluations are major components of this trial.

Introduction

Female breast cancer is a major medical problem with significant public health and societal ramifications. A National Institutes of Health (NIH) Consensus Development Conference held in June 1990, emphasized that, during this decade, more than 1.5 million women (approximately 150,000 per year) in the United States will be newly diagnosed with invasive breast cancer and that about 30 percent of them will ultimately die from the disease (1). It has been estimated that approximately one out of nine women will develop the disease in her lifetime.

Currently, there are three principal strategies directed toward making breast cancer a less significant health problem. The first is aimed at devising better regimens (i.e. new chemotherapy and/or hormonal agents) for the systemic treatment of clinically detectable disease. The second strategy is one directed towards the identification of a greater number of non-detectable and potentially curable breast cancers by more widespread use of screening mammography. A third strategy is to evaluate the worth various agents presumed capable of interfering with the initiation and/or promotion of breast cancer. This approach is generally referred to as chemoprevention. This term is imprecise because the modality or agent being evaluated may not "prevent" the malignant transformation of breast cells, but only prevent subclinical disease from manifesting itself. Several agents are currently being evaluated as potential candidates for use in breast cancer prevention; e.g. a low-fat diet or retinoids. One agent particularly worthy of mention is tamoxifen.

The National Cancer Institute (NCI), through the National Surgical Adjuvant Breast and Bowel Project (NSABP), is sponsoring a nationwide study, the Breast Cancer Prevention Trial (BCPT), that is designed to test the efficacy of tamoxifen in the prevention of breast cancer, coronary artery disease, and fractures due to osteoporosis in healthy women at high risk for breast cancer. The Cancer Care Center of Southern West Virginia at the Charleston Area Medical Center (CAMC) and the Mary Babb Randolph Cancer Center of West Virginia University have been selected to jointly participate in this study along with 118 other centers throughout the United States and Canada. It is projected that 16,000 women over the age of 35 will be entered in this trial, at least 100 of which will be from West Virginia.

Background

Tamoxifen is a synthetic, non-steroidal anti-estrogen which has been found to be effective in preventing breast tumors in animals and inhibiting the growth of breast tumor cells in culture (2). Tamoxifen also has beneficial effects in both pre- and post-menopausal women with advanced breast cancer (3). These findings led to clinical trials of the drug's use as adjuvant therapy and most of these have demonstrated a benefit in disease-free survival and, in some studies, overall survival (4,5,6). Of particular importance is the observation that patients receiving tamoxifen have a significantly lower incidence of contralateral breast cancer than those receiving the placebo (4,5,6). This particular observation is pertinent to the BCPT, in which the efficacy of tamoxifen in preventing the first occurrence of breast cancer is being studied.

When used in post-menopausal women, tamoxifen has been demonstrated to reduce total LDL cholesterol and to slightly raise the

HDL cholesterol (7,8). Since these changes could influence a patient's risk of coronary artery disease, the effects of tamoxifen on coronary artery disease incidence and mortality in the BCPT will also be studied.

In addition to the possible benefits of tamoxifen in reducing the risk of breast cancer and cardiovascular disease, the use of tamoxifen in this trial may reduce the incidence of bone fractures due to osteoporosis. Findings from several studies indicate that the use of estrogens results in a decrease in fractures of both vertebrae and hips and in protection of bone from the rapid loss that accompanies either surgical or natural menopause (9,10,11). Estrogens seem to function primarily by decreasing bone resorption, since they generally do not markedly increase bone density.

By the same logic, tamoxifen, through its antiestrogenic action, might be expected to decrease bone density. This function of tamoxifen seems to be complex. It is known that tamoxifen has the potential for either agonistic or antagonistic activity. Antagonistic effects predominate in a high-estrogen environment, while agonistic effects are dominant in a low-estrogen environment. Since menopause is associated with low-estrogen, tamoxifen may potentially be beneficial to bone. None of the published clinical studies to date evaluating the effects of tamoxifen on osteoporosis have demonstrated an increase in loss of bone mineral density (12-15). In fact, one study (15) showed that the bone mineral density had stabilized.

Toxicities of tamoxifen

A significant concern in any prevention trial studying healthy subjects is the toxicity of the intervention used. Extensive findings reported in the literature indicate that adverse reactions to tamoxifen are relatively rare and only infrequently severe enough to require discontinuing treatment. These side effects have been grouped into two categories:

1) Non-life-threatening; and
2) Potentially life-threatening.

Probably the most comprehensive information regarding non-life-threatening tamoxifen toxicity is from the NSABP B-14 trial (6), in which 2,861 node-negative patients with estrogen-receptor positive breast cancer were randomized into a double-blind, two-group study (placebo vs. tamoxifen). In this study, patients received tamoxifen for more than five years. Reports of hot flashes, vaginal discharge, and irregular menses occurred more frequently in the tamoxifen group. Rare ophthalmic side effects have been described in animal studies and in patients taking high doses of tamoxifen. These include corneal changes, macular edema, and optic neuritis (16-19), all of which appear to be reversible early in treatment with dose reduction or discontinuation. However, no data regarding ophthalmic adverse effects are available from large-scale clinical trials in which a dose of 20 mgs. a day were used.

Potentially life-threatening toxicities associated with tamoxifen have been thromboembolic disease (6,20,21,22), and second primary cancers. In the NSABP B-14 trial (6), the tamoxifen group had a 1.5 percent incidence of thromboembolic disease compared to 0.2 percent for the placebo group, with a 0.1 percent mortality in the tamoxifen group. The thromboembolic risk, is thought related to the estrogenic effect of tamoxifen and may therefore be similar to women taking estrogen replacement therapy. Women with a history of thromboembolic disease will not be eligible for this trial.

Concern over the risk of non-breast malignancies has centered on hepatic and endometrial neolasms. Hepatic neoplasms have been found in animal studies (23,24) using high dose tamoxifen (20-100 times the dose used in humans), but there has never been an hepatic malignancy reported among the several thousand patients on adjuvant breast cancer studies using tamoxifen at 20 mgs. daily. An increase in the incidence of endometrial cancer has been found in women taking estrogens either as replacement therapy or in oral contraceptives (25,26,27). A study from Sweden reported an increased incidence of endometrial cancer in tamoxifen-treated breast cancer patients compared with those receiving no adjuvant treatment (1.4 percent vs. 0.2 percent) (28).

In this study, patients received tamoxifen at a dose of 40 mgs. daily in contrast to the usual 20 mgs./day given in North America. However, tamoxifen employed in clinical trials using 20 mgs. daily has failed to demonstrate as significant an increase in endometrial cancers as was noted in the Swedish trial. In six randomized trials, 9 of 3,091 tamoxifen-treated patients (0.29 percent) developed endometrial cancers whereas 4 of 3,097 (0.12 percent) of control patients had such cancers (29). Most of those patients who developed endometrial cancer, had stage 0 or I disease which should be easily detectable and curable.

Conduct of the trial

When an eligible participant agrees to enter the study, she will be randomized to receive either tamoxifen or a placebo. Both groups will take two tablets daily for five years. Before entering the study, participants will have a physical examination and some or all of the following studies:

1) Mammogram (if not done within a six-month period of time before starting the study),
2) Blood tests, including complete blood count, liver chemistries, and lipid profile (HDL level, cholesterol, triglycerides),
3) Electrocardiogram (if not done within one year prior to the study) if age 55 years or over; and
4) Pelvic examination (if not done within six months prior to the study).

Initially and at specified intervals during the study, the participant will be required to complete a questionnaire regarding her personal health and lifestyle habits. During the first year of the study, she will return for follow-up studies at three, six, and 12 months.

At the initial visit and at the three-month and six-month visits, the participant will have a physical examination (including breast exam) and blood tests, (CBC, lipid profile, etc.). At the 12-month visit, the physical exam (including pelvic exam) and blood work will be repeated.

During the second, third, fourth, and fifth years of study participation, the physical exam and blood tests will be performed every six months. A mammogram and pelvic examination will be done annually.

Eligibility requirements

Women are potentially eligible for this study if they are 60 - 78 years of age with or without additional risk factors, or at least 35 years of age and also have an additional risk for breast cancer based upon the following factors:

1. Family history of breast cancer
2. Diagnosis of lobular carcinoma in-situ
3. Breast biopsies for benign disease
4. Age at first live birth
5. Atypical hyperplasia of the breast
6. Age at onset of menarche

Women who are interested in participating can contact one of the centers who will have their profile for breast cancer assessed by computer from the NSABP central office. If their risk is at least that of a woman 60 years of age, they are eligible to be considered for the trial.

Women interested in particiating or obtaining more information may contact the Cancer Care Center of West Virginia in Charleston at 348-9541, the Mary Babb Randolph Cancer Center in Morgantown at 293-3515 or 4500) or call 1-800-4-CANCER.

It is hoped that participation in this study will help contribute to the control of breast cancer and perhaps reduce coronary heart disease and osteoporotic fractures in women as well.

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Cardiopulmonary arrest in pregnancy: The role of Caesarean section in the resuscitative protocol

DWIGHT R. CORDERO, M.D.
ROGER C. TOFFLE, M.D.
CHRIS S. McCAULEY, M.D.
Department of Obstetrics and Gynecology, West Virginia University, Morgantown

Abstract

A 36-year-old black multipara at 32 weeks gestation was referred with apparent peripartal cardiomyopathy. Upon arrival, she was found to be in pulmonary edema; and shortly thereafter developed cardiopulmonary arrest. She failed to respond to initial attempts at cardiopulmonary resuscitation but subsequently responded after Caesarean section and pericardiocentesis.

This case exemplifies the unique aspects of performing cardiopulmonary resuscitation on a gravid female in the latter part of pregnancy and that Caesarean section should be considered an integral part of the resuscitative protocol when standard protocols fail.

Introduction

The differential diagnosis for the pregnant patient who presents with pulmonary edema includes: pre-eclampsia and eclampsia, iatrogenic causes such as administration of various pharmacologic agents or excess intravenous fluids, congenital or rheumatic heart disease, and cardiomyopathies.

Cardiomyopathies are diseases of the myocardium leading to decreased cardiac function as a result of decreased contractility. Peripartal cardiomyopathy (PPCM) is a pregnancy associated condition that has been described by Demakis and colleagues as occurring in the last month of pregnancy, or within the first five months postpartum in a patient without evidence of cardiac disease prior to the last month of pregnancy and with no other obvious etiology for cardiac failure (1).

Peripartal cardiomyopathy is most commonly seen in black multiparas. The various etiologies that have been implicated as the causes for this condition include inadequate nutrition, viral agents, pre-eclampsia, immunologic factors, infection, anemia, strenuous physical activity, and iatrogenic fluid overload as a result of medical therapy or cultural practices (2).

It must be remembered that the pregnant patient with compromised cardiac function, such as is seen with a cardiomyopathy, may develop cardiopulmonary arrest (3). Resuscitation involves both the mother and the fetus, and the management of such a situation must take into account the physiologic and anatomic changes of pregnancy which may hinder the effectiveness of standard resuscitation protocols.

Case report

A 36-year-old black female, Gravida 4, Para 3-0-0-3, at 32 weeks gestation presented to her local physician with a six-day history of cough and a three-day history of progressive dyspnea, and three pillow orthopnea. She had received no prenatal care, and her last two pregnancies had been complicated by pre-eclampsia. Her past medical history was negative for cardiovascular or renal disease.

The initial evaluation at the referring hospital showed a pulse rate of 118; respirations 32; temperature 98 degrees F; BP 176/104; some jugular venous distension; bibasilar rales; a grade III/VI systolic murmur; and 2+ pitting ankle edema. Arterial blood gases demonstrated hypoxia and a CXR showed bilateral pulmonary edema and effusions.

She was then transferred to our institution for further care and upon admission, her blood pressure was 176/110, temperature 37.3 degrees C, pulse 118, and she had labored respirations at 40 breaths per minute and appeared cyanotic despite receiving 2L of oxygen by nasal cannula. Physical examination showed scattered bilateral rales, a grade II/VI systolic ejection murmur, and 1+ bilateral pedal edema. Fetal monitoring showed a rate of approximately 150 beats per minute that accelerated with fetal movement.

Within 10 minutes of her arrival at our institution, she became progressively dyspneic and her respiratory rate increased to 40-50 breaths/minute despite the fact that she was now receiving 50 percent oxygen by face mask. A chest X-ray showed cardiomegaly and bilateral pleural effusions. An EKG showed sinus tachycardia, evidence for a left atrial abnormality, left ventricular hypertrophy, and poor R wave progression from V1-V4. Arterial blood gases showed: pH 7.12; PO2 42 mm HG; PCO2 58 mm HG; and a bicarbonate level of 19.3.

The patient was given lasix and morphine but continued to deteriorate. She was intubated and given ventilatory support, but shortly thereafter went into cardiopulmonary arrest with ventricular fibrillation. Even though CPR and ACLS protocols were instituted, she developed persistent electromechanical dissociation.

A classical Caesarean section was then performed on an emergency basis under unsterile conditions. Approximately 10 minutes into the code, after failing to respond to the standard ACLS protocol, a 1740 gram female infant with Apgars of 2 and 3 at 1 and 5 minutes respectively, was delivered. A pericardiocentesis was performed during the course of the Caesarean section and resulted in the removal of 150 cc's of serosanguinous fluid.

Shortly after the delivery of the infant, the patient converted to normal sinus rhythm and she was transferred to the Intensive Care Unit with stable vital signs. Echocardiography performed after delivery showed diffuse hypokinesis, left ventricular hypertrophy and dilatation, with an ejection fraction of 30-40 percent.

A follow-up examination five days later showed marked improvement in cardiac function with an ejection fraction of 45-50 percent, but with persistent evidence of dilatation and hypertrophy. Viral and mycoplasma cultures were negative. She continued to do well and was discharged. The infant developed signs of anoxic encephalopathy, and at the time of

discharge, exhibited severe motor delay. The patient failed to return for follow-up postpartum health care.

Discussion

The management of cardiopulmonary arrest during the third trimester of pregnancy is a unique situation, requiring prompt and sometimes aggressive steps in order to maximize the potential for survival of the mother and fetus.

External chest compression and prompt endotracheal intubation with assisted ventilatory support must be carried out immediately. By convention, cardiopulmonary resuscitation is performed with the patient in the supine position; but during the last trimester of pregnancy, the gravid uterus may cause obstruction of the aorta as well as the vena cava resulting in a reduction in venous return and cardiac output (4). The mass effect of the gravid uterus may increase intrathoracic pressure so as to inhibit flow of blood to and from the heart. In addition, this mass effect may make the chest wall less compressible. This combination of factors may cause external chest compressions to be ineffective. Placement of the patient in the left lateral decubitus position alleviates vascular obstruction but makes chest compression impossible (4). Less extreme measures should include, manual displacement of the uterus to the left, placement of a wedge beneath the right hip or flank, or placing an operating table in the left, lateral tilt position.

Katz and associates question the ability to perform chest compression when the patient is in anything but a supine position; but Rees and Willis demonstrated that it was possible to perform adequate chest compression in the tilt position when using a wedge specifically designed for this purpose (5,6).

Pregnancy does not appear to be a contraindication to defibrillation, as defibrillation has been performed during pregnancy without subsequent evidence of fetal distress. The fetal heart rate should be monitored because of the theoretical possibility of inducing fetal cardiac arrhythmias (7).

In addition to mechanical considerations, it must be remembered that the arteriovenous oxygenation differential near term is greater in the pregnant patient due to increased oxygen requirements. Thus, inadequate perfusion is not well tolerated by either the pregnant patient or her fetus. For this reason, Lee and colleagues recommend emergency Caesarean section after 15 minutes of continuous CPR or sooner if maternal hypoxia or inadequate circulation is not corrected by CPR or there is evidence of fetal distress (3).

A review of the results of post-mortem Caesarean by Katz and colleagues demonstrated that the best chance for fetal survival occurred when delivery was achieved within five minutes of the onset of the arrest (8). Improvement in maternal circulation that occurs as a result of uterine evacuation increases the potential for successful resuscitation of the mother when cardiac arrest occurs during the latter stages of pregnancy. This has led to the recommendation that delivery of the infant should be considered early in the resuscitation if the standard protocol is unsuccessful (9).

The possible beneficial role that pericardiocentesis played in the resuscitation of this patient is suggested by Sanderson and his associates' finding that 55 percent of their patients with PPCM had pericardial effusions (10).

Summary

Peripartal cardiomyopathy and cardiac arrest during pregnancy are rare occurrences, but the high potential for maternal morbidity and mortality necessitates prompt diagnosis and therapy.

Caesarean section must be considered early in the course of resuscitation in order to increase the potential for maternal as well as fetal survival and to decrease their morbidity. In the patient who arrests as a result of PPCM, pericardiocentesis may play an additional role in their successful resuscitation.

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Efficacious treatment of the common wart (Verruca Vulgaris)

JOE N. JARRETT, M.D.,
Retired Family Practice Physician, Oak Hill

Abstract

A relatively benign lesion, the common wart (verruca vulgaris), probably occurs sometime during the lifetime of most individuals. Since it is usually self-limited, it may attract little attention unless it appears on the sole of the foot, adjacent to a fingernail or toenail, or somewhere on the face. Anyone with a serious interest in the etiology of the wart is directed to the many excellent works on this and related viral lesions. The purpose of this paper is to tell of one doctor's search for a reasonable, non-surgical, non-invasive treatment that would be acceptable to most patients.

Introduction

Sometime during the early 1950s, it came to my attention that a Carroll, Dunham Smith Pharmaceutical Company tablet preparation, Bistrimate, was recommended for the treatment of "chronic sore throat," a malady diagnosed with fair frequency in those days. I had become disenchanted with the removal of the wart with cautery or caustic chemicals and, perhaps spurred by the rapid progress of viral research, it occurred to me that the active principal of Bistrimate (bismuth triglycollamate) might be effective treatment for this common lesion.

Since Bismuth had been widely used for many years in the treatment of syphilis, with weekly intramuscular injections for prolonged periods and in dosages much larger than that contemplated for the bismuth tablet, I had little trepidation about trying oral bismuth to eradicate warts. The arbitrarily assigned dose was one Bistrimate tablet four times daily for 15 days, with a second 15-day course if no improvement was evident two weeks after the first course. Weekly urines were checked to see if there were any signs of renal damage. Each bismuth tablet contained 410 mgs. of bismuth sodium triglycollomate, equivalent to 75 mgs. of metallic bismuth.

Success was immediately evident, with most patients responding to one 15-day course of Bistrimate. Shortly afterwards, though, I became aware of a solution of bismuth produced by the same company: bismuth cevitamate in 1 ml. ampoules, each containing 36.5 mgs. of the chemical, equivalent to 20 mgs. of metallic bismuth. This solution was tried with four-to-six weekly imtramuscular injections, depending on the speed of resolution of the warts. Results were equally gratifying.

About 1974, when FDA requirements for proof of efficacy of any given drug made it economically not feasable for the company to continue to market either of the bismuth preparations, production of both drugs was discontinued. Over the next five years, I searched off and on for the former producer of the oral and injectable bismuth, but to no avail. One result, though, of my endeavor was the discovery of a body of literature from the late 1940s describing the successful treatment of verruca vulgaris by oral bismuth!

Shortly after this, a mother asked me to treat her 12-year-old daughter who had numerous warts on both hands. I explained that the government had succeeded in putting out of production the only non-surgical treatment for warts in my armamentarium, oral and injectable bismuth, and suggested that the child massage each wart twice daily with castor oil - a remedy I had been prescribing for many years with perhaps 50 percent success.

Several weeks later, this woman returned to the office with the same child and showed me her hands which were completely clear. She said her husband, who was a chemistry professor in one of our regional schools, had brought home a bismuth reagent from the laboratory and applied it to the warts full strength every night for two weeks. The warts had disappeared several days later, having gradually shrunk during the time of application of the powdered bismuth. He told me it was sodium bismuthate, a greenish, fine powder.

With this information, I asked my pharmacist to find some of the chemical, and meanwhile the same mother informed me that her husband had treated several plantar warts of another child, apparently unsuccessfully after three weeks of applications. A few weeks later he tried again, this time with complete clearing of the plantar warts (I didn't tell the mother I thought the initial course of treatment had killed the virus and that it had taken additional time for the abnormal tissue to be extruded).

Eventually the pharmacist found the sodium bismuthate, and I made a 10 percent suspension in a water-miscible base and started twice daily applications to a wart of some 30 years' duration on my thumb. After no change was seen, I started using a 50 percent suspension and continued that intermittently for several weeks. This wart disappeared in less than six weeks. Thereafter my "wart register" showed an 80 percent cure rate as I dispensed very small quantities of 50 percent sodium bismuthate suspension from my shelf to be massaged into the warts twice daily.

It was then that I tried unsuccessfully to interest several pharmaceutical companies in producing a bismuth topical product. Apparently the prospective market was not adequate to justify the expense of complying with governmental requirements for marketing new drugs. I managed, however, to trace the original manufacturer through two changes of ownership, finally ending with Cooper Laboratories in New Jersey.

Eventually I managed to communicate with Mister Jerry Grattan at Coopers Lab's, who had been with the company since the early days of Carroll, Dunham, Smith. It developed that Mr. Grattan had been in charge of the early work on the pharmacology and toxicology of bismuth during the marketing of the bismuth-containing products which I had used. He very

kindly sent copies of articles and abstracts which he had prepared during the late 1940s. However, in his letter, Mr. Grattan told me that the current FDA attitude concerning bismuth or other metal therapy was such that it would be practically prohibitive to try to persuade that agency to reaccept a bismuth product for either systemic or topical therapy.

It was interesting that I independently should have found bismuth effective in the eradication of warts. The Carroll, Dunham, Smith Company published the compilation of papers for Mr. Grattan in 1952 for distribution to the profession. These included 11 papers published from 1947 through 1950, all of which detailed the results of the treatment of various dermatological conditions. In addition to verruca vulgaris, the other conditions included syphilis, lupus erythematosus, vitiligo, lichen planus, erythema nodosum, morphoea, erythema induratum, granuloma annulare and sarcoidosis.

In *American Practitioner and Digest of Treatment*, K.A. Baird, M.D., from Canada published a paper entitled, "A Successful Treatment for Warts." He related in some detail the work of numerous authors from 1948 to 1954. This author reported 17 cases of verruca vulgaris treated with no failures. To scotch the idea of psychological cure, he treated two dogs with warts with intramuscular bismuth with complete regression of the lesions.

Since 1979, there has been much research on the family of viruses that includes the verruca vulgaris strain. Various strains of the human papilloma virus have been shown to be the agents responsible for numerous lesions, including malignant tumors of the uterine cervix.

An excellent summary of the various types of warts and available treatment methods by Franklin S. Glickman, M.D., can be found in *"Family Practice Recertification"* published in February 1992. Dr. Glickman is a clinical professor of dermatology at the State University of New York. Treatment would appear now to be limited to chemical, surgical or cryo-destruction of the lesions.

Summary

This article documents an example of the loss of a valuable treatment mode because of economically unacceptable governmental requirements for "proof of efficacy." Available therapy continues to be "freeze, burn, scrape or cut" in the management of the lowly wart.

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Manuscripts to be presented for publication in *The West Virginia Medical Journal* should be prepared in accordance with "Uniform Requirements for Manuscripts Submitted to Biomedical Journals" (1) (International Committee of Medical Journal Editors).

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Use double spacing throughout, including (in the following order) title page, abstract, text, acknowledgements, references, tables, and legends for illustrations. Begin each of the following sections on separate pages: title page, abstract, text, acknowledgments, references, individual tables, and legends for illustrations. Number pages consecutively, beginning with the title page. Type the page number in the upper right-hand corner of each page.

All persons designated as authors should qualify for authorship. Each author should have participated sufficiently in the work to take public responsibility for the concept.

The second page should carry an abstract of no more than 150 words summarizing the manuscript.

Where reference is made to generically-designated drugs, the first such reference must be followed by parentheses containing the most commonly known trade-name drug of that designation. In addition, a listing of all generic drugs mentioned in the article, with their trade-name equivalents, should appear at the end of the article.

Tables (tabular listings) and figures (photos, drawings and charts) should be numbered and the point of reference in the text indicated in parentheses, i.e., (Table 1), (Figure 1).

Photos must be good-quality unmounted glossy prints usually 5 by 7 in. but no larger than 8 by 10 in. Black and white photos are preferred. Color photos will be printed in black and white. Cost of printing photos in excess of four will be billed to the author.

Each photo (figure) should have a label pasted on its back indicating the author's name, its number and an indication of its "top." A separate legend should be provided for each photo. Do not write on the back of photos, or scratch or mar them using paper clips. Do not mount them on cardboard. Drawings and charts should be done in solid black on pure white.

Number references consecutively in the order in which they are first mentioned in the text. Identify references in text, tables, and legends by arabic numerals (in parentheses).

No more than 25 references will be published free of charge to the author.

Use the style of references seen in this *Journal*, which is based on the formats used by the U. S. National Library of Medicine in *Index Medicus*. The titles of journals should be abbreviated according to the style used in *Index Medicus*. Consult "List of the Journals Indexed," printed annually in the January issue of *Index Medicus*.

All scientific material appearing in *The Journal* is reviewed by the Publication Committee. Manuscripts should be sent to The Editor, West Virginia Medical Journal, Box 4106, Charleston, WV 25364.

1. Ann Intern Med 1982;96:766-71.

President's Page

Robert P. Pulliam MD.

Global Budgeting

The dictionary defines ration as "to make scarce things available either equally or equitably in accordance with need." The synonyms listed are allowance, dole or pittance.

Global budgeting as a mechanism to control health care expenditures is the buzzword in some health care planning circles today. It implies a figure established yearly above which health care expenditures will not exceed. It is built on the premise of a single payor or trust fund type health care system, which further translated means goverment or quasi-government control.

It is often said that the one thing that government does well is collect taxes. It is never said that the government does well in spending. In fact, just the opposite is true in West Virginia because everything is behind.The PEIA retirement and health funds are underfunded, Workers Compensation is severely underfunded and on and on and on.

Suppose we had a global budget for health care and we exceeded the expediture limits. What happens? Either we expand the budget (it is no longer a budget), or we don't pay the bills (now we are in a deficit spending situation).

Sound familiar? Yes, it sounds just like government.

At a recent meeting of the Health Care Planning Commission's Task Force on Finance and Cost Control, Ms. Pat White, the self-appointed legislative czar of health care, said that any designed health care system could not depend on general fund revenues to fund the system.

How better could the problem of legislative failure be stated?

In essence, Ms. White is saying that the Legislature will never be strong enough to address the issue in terms of broad taxation. After all, the deficiencies I have noted are the process of program adoption without proper funding.

A recent survey by the A. Foster Higgins Company of 850 benefit managers, chief executives and CEOs indicated overwhelming opposition to a governmental cap (global budgeting) on health care spending while favoring private sector approaches to cost control.

When 85 percent of Americans have health insurance, it doesn't seem appropriate to reduce their benefits to solve the problems of the 15 percent who don't. Innovative solutions for the 15 percent are required; not allowances, dole, pittance, or yes, rationing for the other 85 percent with satisfactory health care.

Robert P. Pulliam, M.D.

To save health care dollars

It seems to be a fact, with the possible exception of neonatal care, that the older one gets, the more costly become the diseases and mishaps one is likely to encounter. This point is summed up in the rather startling statistic generated several years ago that 90 percent of the total costs of any individual's health care are spent in the last six months of that person's life.

Of course, if one drops dead jogging at age 40 or happens to get run over by a cement mixer at a similar age, those figures don't apply.

All of this brings up an interesting point: the more we extend life, the more lives we save at a young age to live to a more advanced age, the higher we drive up total medical care costs.

Long-term care is what is bankrupting America's health care system according to the American Health Care Association, an organization which represents 75 percent of the nation's nursing homes. It's true. Each time we successfully treat a failing heart or lung or kidney, every time we skillfully carve out, radiate or chemically ablate a cancer, we perhaps prepare an unlucky someone to die in an incomprehensible Alzheimer's nightmare of bed sores, fractured hips or self-imposed starvation.

We mostly lie to ourselves and to the public when we tout some new "medical miracle" as saving millions of dollars in medical care costs. At best, we make some temporary dent in a medical care cost graph as we assure some significant rise in it in a few years. Use of pneumonia vaccines is an example of such savings.

"Well, of course," we are told, "doctors should perform their heroics only when an extension of 'quality life' can be assured."

Wouldn't it be nice if we could make such distinctions? And, to tell the truth, the same measure of "quality" applied to the life of the one giving that advice is unlikely to be the same as that applied to someone he doesn't know, someone in another town, attending another church, belonging to another club.

---If we just could have stopped medical care progress 30 years ago! Think of the dollars we could be saving every year. We could all have designer wardrobes, a condominium in Florida, trips to Hawaii and weekends in London. Perhaps it is not too late. We could stop it right here and reap the benefits later. --- What a happy reverie for our overworked health care planners!

What needs to be done is perfectly obvious if conserving dollars is the aim. But who out there has balls enough to take responsibility for shutting off medical care to anyone, to any group or to any disease or condition presently being treated? There are no such heroes.

It remains a fact that a given amount of medical care must cost the same under any system of payment. The only variable is the quantity of care.

For those whose sole preoccupation is cost, our aging population and our medical proficiency, which is in some measure responsible for that aging, are twin disasters. Neither of these show any indication of voluntarily disappearing.

–SDW

6th Family Practice/Sports Medicine Weekend set

The West Virginia Chapter of the American Academy of Family Physicians has scheduled their 6th Annual Family Practice Weekend and Sports Medicine Conference for November 13-15 at the Radisson Hotel in Huntington.

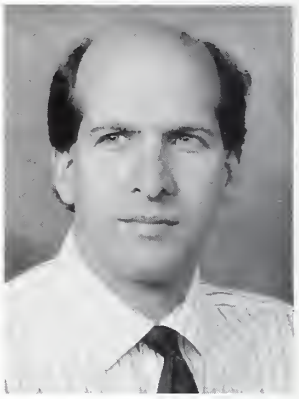
Designed to provide family physicians with an update on the diagnosis and treatment of commonly-encountered problems, this year's meeting has been reviewed and is acceptable for 16.5 prescribed hours by the AAFP, 16.5 hours of Category 1 in continuing education for the AMA, and AOA credit toward Category 2-A for 16.5 hours. This event will again be sponsored by the Family Medicine Foundation of West Virginia; the Marshall University Department of Family Medicine and Community Health; the Marshall University Division of Sports Medicine; and Scott Orthopedic Center, Inc.

The meeting will begin with registration at 7 a.m. on Friday, November 13, and the first scientific presentation, "Running Injuries," by Jack Steel, M.D. of Huntington will start at 8:20 a.m. Other lectures featured that morning will be "Rational Selection of Nonsteroidal Anti-Inflammatory Drugs" by Vincent J. Giuliano, M.D. of Charlottesville, Va.; "Spinal Cord Injuries," by Robert Cantu, M.D., president of the American College of Sports Medicine; "Overweight Adolescents," by Terry Shepherd, Ph.D. of Marshall University; and the "Use of MRI," a panel discussion with all of these speakers and Dennis Burton, medical director of Tri-State MRI and vice president of the WVSMA.

The conference will continue at 1 p.m. with a presentation entitled "A Patient's Perspective of Panic Disorder," by Earl Campbell, an all-pro running back for the Houston Oilers. Following Campbell's talk, Dr. Cantu will again speak and this time he will address "Low Back Etiology, Diagnosis and Treatment." The other speakers during the afternoon will be James Robinson, M.D., clinical assistant professor of family practice and sports medicine in the Tuscaloosa Family Practice Program in Northport, Ala.; Joseph A. LoCascio III, M.D., consultant and surgeon for sight, corneal and external diseases at Huntington Eye Associates, Inc.; and Keith B. Holton, M.D., assistant clinical professor of family medicine at the University Family Practice Center in Cincinnati.

Cantu

Burris



Flashner

Saturday's schedule will commence with registration at 7:30 a.m. and then proceed at 8:30 a.m. with the lecture "Hypertension in the Elderly - The Mandate to Treat," by James F. Burris, M.D., of the Georgetown University Medical School. Other morning programs to be offered are "Bugs and Drugs," "The Treatment of Hypertension in the Diabetic," and "Pharmacological Approach to the Treatment of Depression."

On Saturday afternoon, four subjects will be discussed including the "Diagnosis and Treatment of Peptic Ulcer Disease," "Clinical Controversies in Management of Heart Failure," "LDL-A Standard of Management in the Treatment of Hypercholesterolemia," and "The Role of Calcium Channel Blockers in Hypertension." That evening, a reception will be held at 7 p.m. by the Marshall University Department of Family and Community Health, and then a party featuring the musical group The Vogues will take place at the Huntington Civic Center to raise funds for the Family Medicine Foundation of West Virginia.

The meeting will conclude on Sunday at 12:30 p.m. after lectures by Geraldine Roberts, an attorney with Wallace, Ross and Harris of Elkins, on "Living Wills and Medical Power of Attorney;" Charles E. Turner, M.D., of the Huntington Internal Medicine Group, on "Chronic Hepatitis C with A Hepatitis Overview;" Donald M. Pell, M.D., of the University of South Florida, on "COPD: Can We Do Better?" Steven C. Flashner, M.D., of Duke University Medical Center, on "Nocturnal Enuresis;" Joseph B. Touma, M.D., of the Huntington Ear Clinic, on "Intracranial Complications of Otitis Media," and Paul Blair, M.D., of the Huntington Ear Clinic, on "Nasal Trauma."

For more details and registration information about the meeting, contact the WVAAFP at 776-1178.

Variety of CME events available from AEI

The American Educational Institute, Inc. will be offering CME seminars on the topics of AIDS, malpractice, OSHA, and Medicare every week from October 5 - October 1, 1993 at 28 resort locations throughout the United States.

For information, contact the American Educational Institute, Inc., 401 S. Woodward, Suite 333, Birmingham, MI 48009, or call (800) 354-3507.

Board of Medicine issues special notice

In 1992, the West Virginia Legislature enacted an amendment to the West Virginia Medical Practice Act which required, beginning in 1993, that 50 hours of continuing medical education, satisfactory to the Board, be achieved during each preceding two-year period, as a condition of both active and inactive licensure renewal.

Physicians whose last names begin with the letters A through L received all the information pertaining to acquiring continuing medical education, satisfactory to the Board, in a mailing sent with their individual 1992 through 1994 licensure renewal cards. Continuing education requirements for those physicians whose last names begin with the letters A through L will begin in 1994. Physicians whose last names begin with the letter M through Z, who will be renewing their licenses in 1993, were all sent a special mailing in April 1992, regarding the continuing medical education requirements. However, there is no evidence at the Board offices that the following physicians received the information which the Board sent to them regarding the continuing medical education requirements which they must satisfy beginning in 1993.

It is the responsibility of each individual physician listed below to contact Linda Chambers at the Board offices at (304) 558-2921 if he or she has not received this information.

Michael F. McCagh, MD
Michael A. Maldonado, MD
Daniel F. Melville, MD
Jovan Milutinovich, MD
William A. Morrison, MD
Abdolsamad Mossahebi, MD
Robert W. O'Donnell, MD
Michael J. Owens, MD
Arlene B. Palting, MD
Patrick W. Palumbo, MD
Kuldeep R. Pandit, MD
Kanchanlal S. Patel, MD
Alvaro N. Paz, MD
Sundaram V. Ramanan, MD
Joseph A. Ramsey, MD
Nagineni K. Rao, MD
Uma Maheswari P. Rao, MD
Roberta G. Rice, MD
Bradley L. Rosenberg, MD
Arthur M. Santos, MD
Atef K. Sayed, MD
Martin F. Scheinholz, MD
Lewis A. Schmidt, MD
Alfredo J. Seco-Garcia, MD
Mahesh B. Shroff, MD
Vladimir P. Shurlan, MD
Kathryn F. Skitarelic, MD
Douglas S. Skura, MD
Yaser A. Slayyeh, MD
Thomas M. Sodeman, MD
James R. Staples, MD
William M. Stauffer, MD
John W. Stiller, MD
Daniel D. Sumrok, MD
Demetrios G. Tsoulos, MD
Hasan Turgut, MD
Clifford J. Turner, MD
William S. Van Cise, MD
Sukri Vanichkachorn, MD
Charles M. Weber, MD
James M. Wertman, MD
Dwayne L. Wilson, MD

Laser Surgery Seminar IX scheduled

Recent advances in the use of laser surgery will be highlighted during Laser Surgey Seminar IX on Saturday, November 7 at the Charleston Marriott.

Sponsored by The Eye and Ear Clinic of Charleston and the Department of Surgery, WVU Health Sciences Center, Charleston Division, the seminar is open to physicians, physician assistants, nurses, nurse anesthetists and other health professionals. Romeo Y. Lim, M.D., chief of surgery at The Eye and Ear Clinic of Charleston, is seminar director. The seminar provides 4.5 CME units, 4.5 CE units, AANA, and .45 CEUs.

Further information and registration information is available by contacting Mary Jane Willis, PA, program coordinator, at 343-4371.

Hofreuter elected to national ACPE post

Hofreuter

Donald H. Hofreuter, M.D., F.A.C.P.E., director of medical affairs at Wheeling Hospital, was elected secretary-treasurer of the American College of Physician Executives at the organization's recent meeting in San Francisco.

A native of Wheeling, Dr. Hofreuter received an A.B. degree from Princeton University and his medical degree from the College of Physicians and Surgeons at Columbia University. He completed a rotating internship at Allegheny General Hospital in Pittsburgh and did two years of postgraduate training in occupational medicine at Kettering Institute at the University of Cincinnati.

While he was a resident at the University of Cincinnati, Dr. Hofreuter also worked as a clinical assistant professor of medicine and served as the senior assistant surgeon for the U.S. Navy assigned to the U.S. Public Health Service.

In 1961, Dr. Hofreuter returned to Wheeling to open his private practice for family medicine. He became an assistant professor of medicine at the WVU School of Medicine in 1974, and two years later he went to work for Valley Camp Coal Company as a medical consultant. In 1982, he was named to his current post as director of medical affairs at Wheeling Hospital.

In addition to his practice and his role at Wheeling Hospital, Dr. Hofreuter is the physician reveiwer for the West Virginia Medical Institute-PRO and is a clinical professor at Alderson-Broaddus College. A Fellow of the American Academy of Family Physicians and the American Public Health Association, Dr. Hofreuter is a past president of the Ohio County Medical Society and the medical staff at Ohio Valley Medical Center.

Auxiliary board meeting to feature CME

As a special highlight of the West Virginia State Medical Association Auxiliary's Fall Board Meeting, Category 1 CME credit will be offered for the presentation "The Medical Family Faces Malpractice," which will be made by Dr. and Mrs. Keith Edwards.

The Edwards' presentation will be just one of the many events that will be offered at the meeting, which is scheduled to take place October 6 and 7 at Glade Springs Resort in Beckley. The CME credit is being handled by the Raleigh County Medical Society.

The meeting will start at 8 a.m. with a hospitality hour at the home of WVSMAA President Pacita Salon in Beckley. At 9:30 a.m., tennis, bowling, golf and bridge tournaments will be held at Glade Springs Resort. Following the sporting events, a luncheon will be held and trophies will be awarded. After the luncheon, an executive meeting will be conducted at 2:30 p.m. and welcomes will be delivered by Patricia Sen, president of the Raleigh County Medical Auxiliary; Dr. L. C. Maramba, president of the Raleigh County Medical Society; Emmett S. Pugh III, the mayor of Beckley; and Robert P. Pulliam, president of the WVSMA..

Workshops and special presentations will then begin at 4 p.m., with Debbie Short, executive director of the Women's Resource Center in Raleigh County, discussing "Domestic Violence." Immediately following, Esther Crossen, chairman of the WVSMAA Health Projects Committee, will present a video on this subject and Dr. James L. Comerci, president-elect of the WVSMA will speak about "What Physicians Can Do About Domestic Violence." In addition, two other workshops will also be featured that afternoon entitled "Women and the Law," by Kristin Keller, assistant prosecuting attorney for Raleigh County, and "Sexual Harrassment" by Debra McHenry, an attorney in Charleston.

The evening's activities will include a buffet dinner at 6:30 p.m., the seminar by Dr. and Mrs. Edwards at 7:45 p.m. and suprise entertainment by the Harrison County Medical Auxiliary at 9:15 p.m. The meeting will conclude the next day with a board meeting from 9 a.m. - 4 p.m.

For more details, please contact Pacita Salon at 763-4444.

WVACS Officers

The West Virginia Chapter of the American College of Surgeons held their annual meeting April 29-May 2 at The Greenbrier. Officers attending included: (Front Row) Dr. Herbert E. Warden, governor; Dr. Amabile Milano, councilor; Dr. Carl Kite, president-elect; Dr. Donald E. McDowell, president; Dr. Willis Trammell, councilor; and Dr. Jamal Khan, councilor. (Second Row) Dr. Gene Duremdes, second vice president; Dr. Paul Burke, councilor; Dr. Verne McConnell, past president; Dr. James Kessel, chairman of the Trauma Committee; Dr. Eric Mantz, chairman of the Cancer Committee and immediate past president; and Dr. Rigoberto Ramirez, councilor.

NIOSH-approved spirometry course offered by ALAWV

The American Lung Association of West Virginia is offering its NIOSH-approved spirometry course in Morgantown, October 20-21, at the Ramada Inn.

Dr. Daniel Banks, professor and chief of the Section of Pulmonary and Critical Care at the West Virginia University School of Medicine, and Dr. Bipin Avashia, clinical associate professor of medicine at West Virginia University, Charleston Division, will be course directors. The guest lecturer will be John L. Hankinson, Ph.D., chief of the Clinical Investigations Branch of the Appalachian Laboratory for Occupational Safety and Health. Instructors will provide hands-on experience to ensure that participants will meet the course objectives.

The course is designed for physicians, nurses, respiratory therapists and other health care providers involved in spirometry screening programs. Cost is $220 until October 1, and then $250 afterwards. The fee covers all instructional materials, lunches, and refreshments. Enrollment is limited due to NIOSH guidelines for an approved course, so early registration is recommended.

For more information, contact Shawn Harris Chillag, American Lung Association of West Virginia, P.O. Box 3980, Charleston, WV 25339 or call 342-6600.

Washington, D.C. site for cardiology seminar

The American College of Cardiology will be sponsoring a seminar entitled "New Techniques and Concepts in Cardiology," at the Hyatt Regency Hotel in Washington, D.C., October 22-24. This meeting will offer 16 Category 1 CME credits.

For more information, contact the Registration Secretary, Extramural Programs Dept., American College of Cardiology, 9111 Old Georgetown Rd., Bethesda, MD 20814-1699 or phone (800) 257-4739 (outside the United States and Canada call (301) 897-2695).

LASER SURGERY SEMINAR IX

Saturday, November 7, 1992
Charleston Marriott

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FOR REGISTRATION INFORMATION, CONTACT:
Romeo Y Lim, MD, Seminar Director
(304) 353-0227 or 1-800-642-3049 (WV

Continuing Medical Education

Listed on this page are some of the upcoming CME programs which will be held in the state.

The programs this month were compiled by: Patricia Barnhart, WVSMA loss control coordinator; Robin Rector, coordinator for CME for Charleston Area Medical Center; Kari Long, program director of CME and rural services for WVU; Carol Davis, director of education for Martinsburg City Hospital, Inc., and Thelma Wilson, education coordinator for Raleigh County Medical Society.

Futher details about these CME activities may be obtained by calling Barnhart at 925-0342; Rector at 348-9580; Long at 293-3937; Davis at 264-1246; and Wilson at 255-6341.

If you would like to have the CME programs offered by your institution or association for physicians printed in the *Journal*, please contact Nancy Hill, managing editor, at 925-0342.

West Virginia State Medical Association - Charleston

Sept. 26 - "First Generation Loss Control Seminar," Clarksburg

Oct. 10 - "Third Generation Loss Control Seminar," Mineral Wells

CAMC/WVU Health Sciences Center - Charleston

Sept. 25 - "7th Annual Trauma Seminar," Charleston Marriott, 8 a.m. - 4:30 p.m.

WVU Health Sciences Center - Morgantown

Sept. 17-19 - "18th Annual Hal Wanger Family Medicine Conference"*

Sept. 25-26 - "13th Annual Ophthalmology Clinical Conference," Lakeview Resort Conference & Center

Oct. 2-3 - "Pediatric Oktoberfest '92"*

Oct. 3 - "Pat Tuckwiller Memorial Seminars: Alumni Weekend," Lakeview Resort & Conference Center*

Oct. 9-10 - "Fall Cancer Conference: Cancer in the Young and Elderly"

Oct. 16-17 - "Anxiety Disorders in the Primary Care Setting," Chestnut Ridge Hospital*

Oct. 17 - "Behavioral and Developmental Pediatrics"*

Oct. 18-19 - "The Rural Health Conference: Creating Healthier Communities"

** Held in conjunction with a home football game*

Martinsburg City Hospital, Inc. - Martinsburg

Sept. 30 - "Oncologic Emergencies/ Clinical Role of GCSF in Cancer Treatment," Peter Raich, M.D., and David VanEcho, M.D., 6 p.m. - 9 p.m.

Raleigh County Medical Society - Beckley

Sept. 29 - "Workup and Treatment of Hirsutism," Tamer Yalcinkaya, M.D., 6:30 p.m.*

Oct. 1 - "TBA," James S. Tan, M.D., 6:30 p.m.*

Oct. 10 - "Critical Care Medicine," Daniel E. Banks, M.D.; Hisham Bismar, M.D.; Harakh V. Dedhia, M.D.; and Karl Yang, M.D., 9 a.m.*

Oct. 13 - "Hypercholesterolemia: What Lipid Fractions Are Important?" Gordon Gutherie, M.D., 6:30 p.m.*

Oct. 15 - "Control of Pain in the Terminal Patient," Neil Ellison, M.D., 6:30 p.m.*

**Held at Black Knight Country Club*

Outreach Programs

Key to Sponsors

★ *WVU Health Sciences Center, Morgantown*

☐ *CAMC/WVU Health Sciences Center, Charleston*

Gassaway ☐ Braxton County Memorial Hospital, Sept. 30, 7 p.m., "Pediatric Transport Team Concept," Michael Waldeck, M.D., and the Pediatric Transport Team

Fairmont ★ Fairmont Clinic, Oct. 21, 1 p.m., "Pediatric Orthopedic Evaluation for the Lower Extremities," Fairmont General Hospital, Eric Jones, M.D.

Fairmont ★ Fairmont General Hospital, Oct. 6, 7:30 p.m., "New Drugs for Induction of Ovulation," Roger Toffle, M.D.

Man ☐ Man Appalachian Regional Hospital, Sept. 22, 7 p.m., "Functional Endoscopy Sinus Surgery," Austin Wallace, M.D.

Martinsburg ★ VA Medical Center, Oct. 1, 3 p.m., "Gastrointestinal Endoscopy," Ronald Gaskins, M.D.

New Martinsville ★ Wetzel County Hospital, Oct. 8, 11:30 a.m., "TIAs and Strokes," John Brick, M.D.

Philippi ★ Broaddus Hospital Association, Oct. 8, 7 p.m., "Management of Obesity," Irma Ullrich, M.D.

Point Pleasant ☐ Pleasant Valley Hospital, Sept. 24, noon, "Renal Failure," Bashir Sankari, M.D.

White Sulphur Springs ★ The Greenbrier Clinic, Sept. 28, 4 p.m., "AIDS," Raymond Smego, M.D.

Williamson ☐ Williamson Appalachian Regional Hospital, Sept 24, 5:30 p.m., "Update on Thorascopy," John Chapman, M.D.

Electromyography and Nerve Conduction Studies.

★

Prasadarao B. Mukkamala, MD
Diplomate of American Board of Physical Medicine and Rehabilitation.

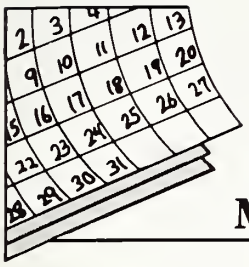
Diplomate of The American Board of Electro-Diagnostic Medicine

★

FOR APPOINTMENT
CALL (304) 344-5153

★

Prasadarao B. Mukkamala, MD
Union Square
1 Monongalla Street
Charleston, WV 25302



Medical Meetings

September

24—Surviving Physician Payment Reform, WVSMA (sponsor), Beckley
24-26—16th National Conference on Correctional Health Care, National Commission on Correctional Health Care (sponsor), Chicago
25-26—The New Anti-Hypertensive Regimes, Ohio State University, Columbus
25-26—13th Annual Clinical Ophthalmology Conference, WVU Department of Ophthalmology, Morgantown
25-27—Dermatopathology, Ohio State University, Columbus
28-October 2—Medical Decision Making at the End of Life, Ohio State University, Columbus
30-October 2—Governor's Conference on Adult/Elder Abuse, Morgantown

October

2—Financial Strategies for Successful Retirement, AMA (sponsor), Pittsburgh
2—Seminar in Pulsed Dye Cutaneous Laser Surgery, Georgetown University Medical Center (sponsor), Washington, D.C.
3—Successful Money Management, AMA (sponsor), Pittsburgh
3—Neurology for the Non-Neurologist, Ohio State University, Columbus
9-10—Cardiology Update 1992, Ohio State University, Columbus
10—Financial Strategies for Successful Retirement for Senior Physicians, AMA (sponsor), Dallas
10-14—Make the Quality Connection: Annual Educational Conference of the National Association for Healthcare Quality, Cincinnati
11—Gearing Up for Retirement, AMA (sponsor), Dallas
15—Joining a Partnership or Group Practice, AMA (sponsor), New York City
15—Surviving Physician Payment Reform, WVSMA (sponsor), Huntington
17—2nd Annual Vascular Surgery Update: Cerebrovascular Disease Surgery, CAMC and WVU, Charleston Division (sponsors), Charleston
20-21—American Lung Association's NIOSH-Approved Spirometry Course, Morgantown
22-25—Intense Orthopedic and Sports Medicine MRI Weekend Review, MRI Educational Foundation, Inc. (sponsor), Cincinnati

For More Information . . .

Contact the Journal at (304) 925-0342 for additional information about most of the above meetings.

Poetry Corner

A Plea to Smokers

At times I cough, I gag, I choke
From pipe, cigar or cigarette smoke.
It's quite all right to smoke, I suppose
So long as your smoke avoids my nose.
Perhaps you don't mind cigarette breath
Emphysema, cancer or even death.
Crush your butts in an ashtray, try to learn
That furniture, drapes and carpets burn.
So smoke all you want, I do not care
Just so long as you do not foul my air
I should say, though, before this poem ends
That I still count some smokers among my friends.

Harold L. Saferstein, M.D.

Please address your submissions for Poetry Corner to: Stephen D. Ward, M.D., Editor, West Virginia Medical Journal, Box 4106, Charleston, WV 25364.

"I KNOW I'VE BEEN SITTING HERE ALL MORNING... WE'RE PLAYING DOCTOR AND I'M IN THE WAITING ROOM."

Department of Health & Human Resources

Bureau of Public Health News

This page of material is submitted and paid for by the Bureau of Public Health.

HIV-negative AIDS cases being studied

Cases of HIV-seronegative persons with low CD4 T-cells and AIDS-defining clinical conditions have been reported in medical literature and to the Centers for Disease Control (CDC). The West Virginia AIDS surveillance staff is requesting that health care professionals report cases of this nature to them.

These cases are the highest priority for special investigations by surveillance staff and should be mailed in a confidential envelope to:

Loretta E. Haddy
DHHR
Surveillance and Disease Control
1422 Washington St. E.
Charleston, WV 25301

As with HIV and AIDS reporting, patient confidentiality is closely guarded and specific patient identifiers are never revealed even to the CDC. Patient indentification to the West Virginia surveillance office is needed to eliminate duplication of reports.

The cooperation of health care professionals in reporting ICL cases will assist the CDC and other public health agencies develop a more precise case definition to examine this problem, as well as provide the needed resources for investigators conducting etiological studies.

For more details, contact Loretta Haddy, state epidemiologist, or a field investigation coordinator at 1-800-423-1271.

Statewide cancer registry established

On March 6, the West Virginia Legislature passed a bill to establish a statewide cancer registry. This legislation will expand the Bureau's Breast and Cervical Cancer Incidence Registry, instituted in 1991, to a full cancer registry designed to collect information on all newly diagnosed cancers with the exception of non-melanoma localized skin cancers.

Data will be collected on cancer cases from the 12 existing hospital-based tumor registries. Staff from the central cancer registry will identify cases and abstract case information in laboratories, cancer treatment demographics, reporting sources and diagnostic information including site of primary tumor, histologic type, and stage at diagnosis for all cases meeting the criteria for reportable cancer diagnosed in West Virginia residents from January 1, 1993, forward.

As with the information from the Breast and Cervical Cancer Incidence Registry, data from this expanded cancer registry will ultimately be used, if necessary, in the investigation of unusual clustersof disease and to direct health education and screening activities to high-risk populations for prevention and early detection of cancer in West Virginia.

For more details about the cancer registry, contact Beverly Crowder at 558-5358.

Task force releases report on OB care

According to the West Virginia Perinatal Task Force, the state should continue emphasizing prenatal care by recruiting and training obstetrical providers, developing a system of care that enhances communications and working relationships among those providers, and by improving the state's malpractice climate.

The task force made these recommendations in a final report to the Bureau of Public Health Commissioner William T. Wallace Jr., M.D., M.P.H., who appointed the task force last year to study the obstetrical care system in the state. The initial task force included physicians, nurses, administrators, nurse-midwives and nurse practitioners. The Bureau is studying the task force's report and making plans for implementation of many of the recommendations.

For more information on the report, call the Bureau of Public Health at 558-2971.

AIDS educational materials available

The Bureau of Public Health AIDS Program continues to urge individuals and groups to take advantage of its various educational services which include infection control, AIDS in the workplace, women and AIDS, and AIDS in the health care industry.

The AIDS Program maintains a library of educational videos, posters and literature. All services are free of charge.

For more information, contact Trina Bartlett at 1-800-642-8244 or 558-2950.

County boards of health asked to take more active role

Members of West Virginia's county boards of health are being urged by Bureau of Public Health Commissioner William T. Wallace Jr., M.D., M.P.H., to take a more active role in networking with other health care providers in their communities.

Dr. Wallace recently met with board members to encourage their awareness and participation in the Health Care Planning Commission's process of evaluating the state's health care delivery systems. He said that county health departments and their boards should be leaders in faciliting the changes in health care which are occurring throughout the state and the nation.

Dr. Wallace suggested that counties form coalitions and partnerships between providers such as hospitals, primary care centers and private practitioners in order to meet the unique needs of individual communities.

A Salute To Women In Medicine

(Seated, then left to right) **Mary Ann Contogiannis, MD,** resident physician member, AMA Board of Trustees (since 1989), surgical resident, East Carolina University School of Medicine, Greenville, NC; **Palma E. Formica, MD,** member, AMA Board of Trustees (since 1990), family physician and chair, Department of Family Practice, St. Peter's Medical Center, New Brunswick, NJ; **Melissa J. Garretsan,** medical student member, AMA Board of Trustees (beginning June 1992), medical student, Maya Medical School, Rochester, MN; **Nancy W. Dickey, MD,** member, AMA Board of Trustees (since 1989), family physician, Fort Bend Family Health Center, Richmand, TX.

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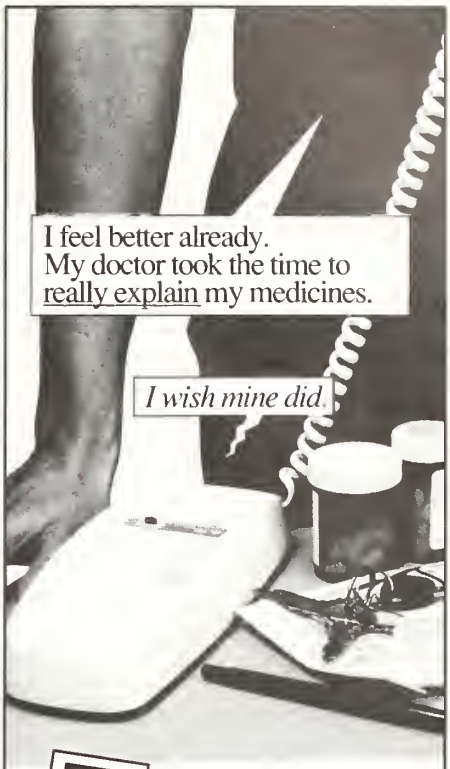

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Compiled from material furnished by the West Virginia University Health Sciences Center, Communications Division, Morgantown

New aortic valve surgery being performed at HSC

Cruzzavala

The WVU Health Sciences Center will soon be one of the few centers in the nation to utilize allografts and autografts for aortic valve surgery.

The procedure will be performed by Dr. Jose Cruzzavala and other cardiothoracic surgeons. Dr. Cruzzavala recently attended the Symposium on Aortic Valve Surgery in Kauai, Hawaii, where he received training on valve implants from Donald Ross, DSc, the surgeon who developed the technique in the 1960s.

The symposium was sponsored by CryoLife Cardiovascular, Inc. CryoLife will assist the HSC in establishing its own bank for cryo-preserved veins for myocardial revascularization and peripheral vascular surgery. Company representatives will teach WVU surgeons, physician assistants and staff clinical methods for procurement of valves and veins and preservation techniques.

National magazine rates Cancer Center in top 100 facilities

The Mary Babb Randolph Cancer Center at WVU is one of "America's Top 100 Cancer Treatment Centers" according to a list compiled by *Coping* magazine. The magazine is a national publication for cancer patients and survivors.

Coping editors and a team of internationally recognized oncology physicians and researchers chose the centers on the list. "This listing represents the treatment centers that have become regionally and/or nationally acknowledged for exceptional care and treatment of cancer patients," *Coping* editor Randy O'Brien said in a note accompanying the list.

The Mary Babb Randolph Cancer Center is the only West Virginia institution on the list.

Surgery professor serves on faculty for conference in Spain

Hochberg

Dr. Julio Hochberg, associate professor of surgery, participated in the 10th Congress of the International Confederation for Plastic and Reconstructive Surgery, June 28 - July 3, in Madrid, Spain.

At the conference, Dr. Hochberg led a roundtable discussion of muscle flaps, chaired a video session, and presented papers on tourniquet control for lesions of the scalp and muscle coverage of a ruptured right ventricle.

WVU CME program awarded four-year reaccreditation

The WVU Continuing Medical Education (CME) Program has received a four-year reaccreditation from the Accreditation Council for Continuing Medical Education.

In the past year, the Office of CME offered 37 programs to physicians in the region. A total of 988 physicians attended these programs.

In addition, 58 lectures have been scheduled at 10 off-campus sites in 1992. The office also coordinates programs for WVU faculty physicians.

WVU lists fall CME schedule of events

The continuing medical education conferences being sponsored by the WVU School of Medicine this fall will be as follows: (All events will be held in Morgantown except those noted.)

***Sept. 17-19 (Maryland)** -- 18th Annual Hal Wanger Family Medicine Conference

Sept. 25-26 -- 13th Annual Ophthalmology Clinical Conference (Lakeview Resort & Conference Center)

***Oct. 2-3 (Boston College)** -- Pediatric Oktoberfest '92

***Oct. 3 (Boston College)** -- Pat Tuckwiller Memorial Seminars (Lakeview Resort and Conference Center)

Oct. 9-10 -- Fall Cancer Conference: Cancer in the Young and Elderly

***Oct. 16-17 (Syracuse)** -- Anxiety Disorders in the Primary Care Setting (Chestnut Ridge Hospital)

***Oct. 17 (Syracuse)** -- Behavioral and Developmental Pediatrics

Oct. 18-19 -- The Rural Health Conference

***Oct. 23-24 (Penn State)** -- Surgery Update 1992

***Oct. 24 (Penn State)** -- Geriatrics: Senior Care 1992

***Oct. 24 (Penn State)** -- 13th Annual Orthopedic Reunion Day: Orthopedic Trauma (MountainView Regional Rehabilitation Hospital)

Oct. 30-31 (at Miami, Fla.) -- Pat Tuckwiller Memorial Seminars (Ft. Lauderdale, Fla.)

***Nov. 7 (East Carolina)** -- 1992 Appalachian Regional Stroke Symposium

Nov. 20-21 (Louisiana Tech) 2nd Annual N. LeRoy Lapp, M.D. Teaching Days

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For more details, call 293-3937. (Physicians calling long distance may dial 1-800-WVA-MARS and ask for the Office of CME).

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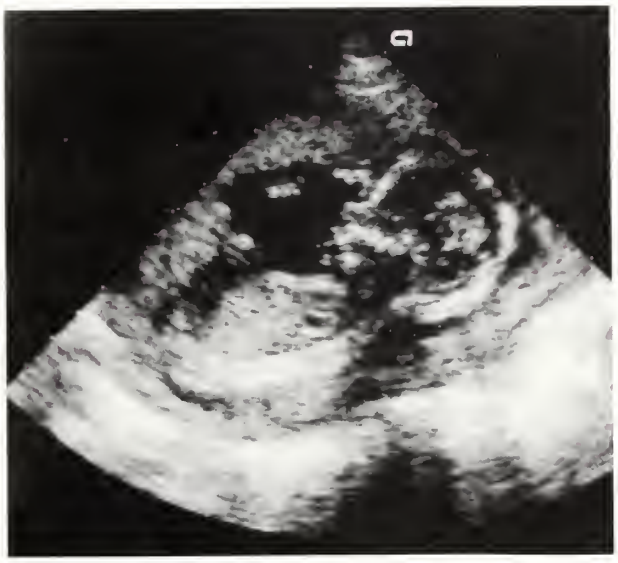

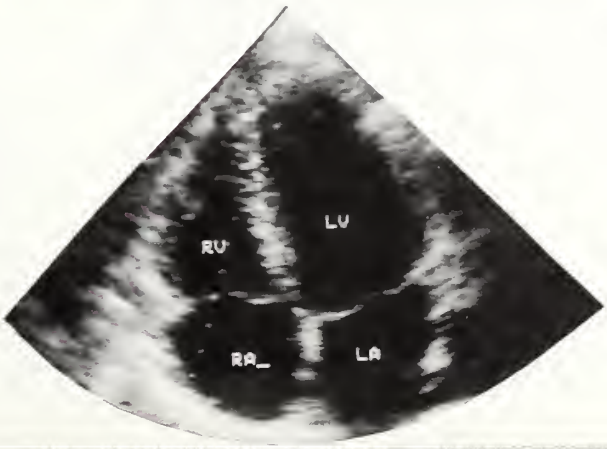

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Compiled from material furnished by the Office of University Relations, Marshall University, Huntington.

Computer program connecting rural students with scientists

An innovative program spearheaded by a Marshall University research scientist, Dr. Susan DeMesquita, is grooming young rural students for productive careers in science, engineering and medicine.

Five scientists from the Marshall University School of Medicine are participating in the program, and major support also is being provided by the Marshall University Computer Center.

"With help from the Benedum Foundation and organizations all across the region, we've set up a system that allows rural students in places like Matewan and Welch to do experiments with West Virginia scientists and tap into educational resources not just in our state, but all over the world," said Dr. DeMesquita, who is program director for the project.

The program is an extension of the national Science-by-Mail program of the Boston Museum of Science. Nationally, this program matches 23,000 students with 2,400 scientist "pen pals" to conduct experiments and exchange information. Through the West Virginia program, rural students will be the first in the nation to be able to communicate with their scientists through computerized electronic mail.

"We're trying to grab these kids and say, 'We want you to be the physicians, the scientists, the engineers of the next century,'" Dr. DeMesquita said. "For the first time, these kids will have access to the state higher education network, which will allow them to communicate with their assigned West Virginia scientist or any scientist they want anywhere in the world. A student in Japan or Spain can send a message directly to a student in Matewan."

The program is expected to reach more than 150 students at Matewan Junior High School, Welch Vocational Center, Athens High School, Wayne County High School and Harts High School. The students are being sponsored by organizations in their home communities.

Jan Fox, chair of Marshall's Department of Academic Computing, said the program begins to prepare students for an expected nationwide shift in where people work.

"The whole job market is shifting to a more electronic base," Fox said. "People joke about our state flower being the satellite dish, but, seriously, technology is a way to get in and out when you can't do it by roads. Through this program, I can see children going home and saying 'Guess where I went today — I went to Ireland' or 'Guess what — I talked to an astronaut!'"

Beverly Walter, grants program director for the Benedum Foundation, said the plan to link rural children with scientists throughout the world "will provide an unimaginable educational opportunity for these teachers, students and families."

The statewide effort to "go electronic" with the program is a cooperative venture of Sunrise Museum, more than a dozen schools and businesses in the region, and scientists from Marshall, West Virginia University, West Virginia Institute of Technology, Davis and Elkins College, the U.S. Forest Service and NASA.

The program is funded by $35,000 from the Benedum Foundation, $15,000 from the West Virginia NASA Space Grant Consortium, and $22,800 in grassroots support from West Virginia communities, the Ashland Oil Foundation and regional organizations.

Course focusing on primary-care medicine

Third-year students from the Marshall University School of Medicine recently spent two weeks working with physicians in 14 West Virginia communities as part of a course on primary-care medicine.

Marshall hopes the course will encourage more students to enter such fields as family practice, general internal medicine and pediatrics, according to Dr. Linda Savory, assistant dean for curriculum and evaluation.

Before observing and working with individual physicians, students spent a week in a Huntington-based program designed to help them adjust quickly to their new medical duties. They then spent two weeks with primary-care physicians in Weirton, Wheeling, Kenova, Charleston, Huntington, Spencer, Milton, Beckley, Hurricane, St. Albans, Hamlin, Dunbar, Wayne and Glen Dale.

Marshall is a national leader in the percentage of graduates entering primary-care fields, and has ranked as high as second in the nation in the percentage entering family practice residencies.

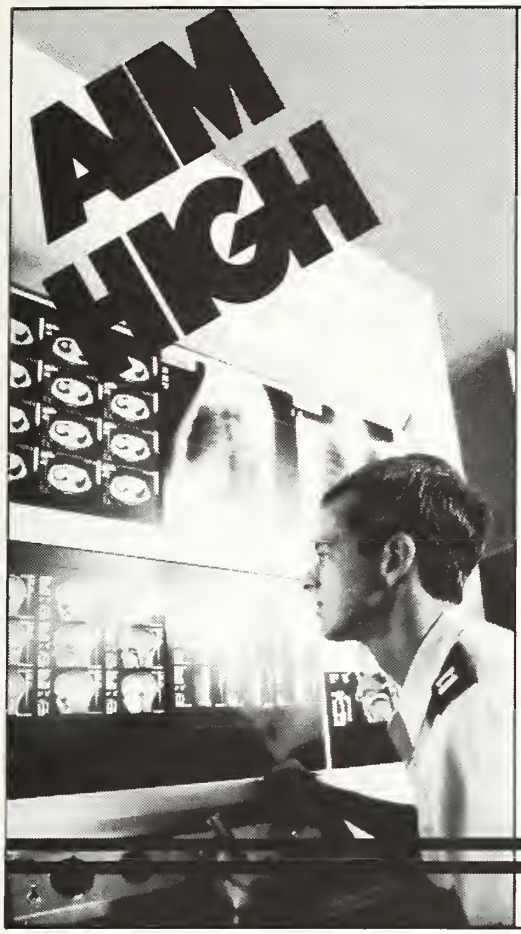
FP residency program awarded five-year accreditation

The family practice residency program has received the maximum five-year accreditation from the Accreditation Council for Graduate Medical Education.

"Five-year accreditation has, at least in the past, been a rarity," said Dr. Stephen Petrany, director of the program. "Certainly it is a sign they are very confident in the job we are doing. We also did well in filling our residency program at a time when other programs are having increasing trouble recruiting, so this is a one-two punch that indicates to us that our program is doing exceptionally well.

"The individual who reviewed our program commented while he was here that he was very impressed with the quality of our residents, by the positive role family practice and our residency program have within the university setting, and by the quality of our faculty," Dr. Petrany added.

Previously the program had three-year accreditation, which is typical for good programs, Dr. Petrany commented.



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References:

1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
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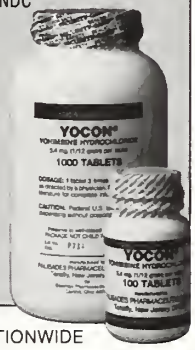

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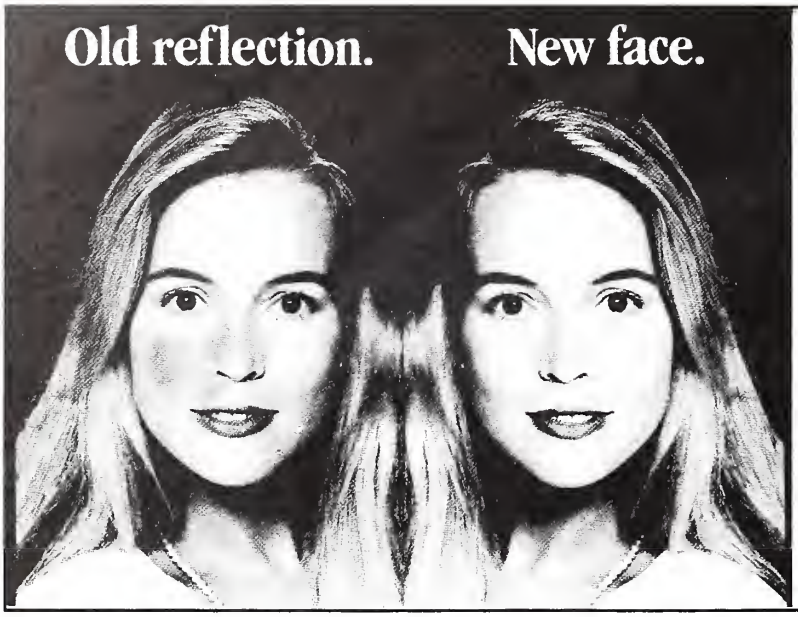

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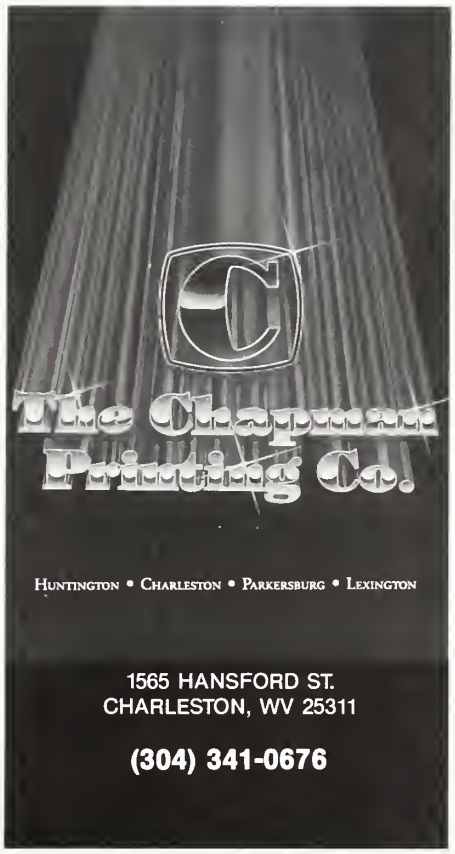

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References: 1. Data on file, Searle. 2. Edmonds D, Würth JP, Baumgart P, et al. Twenty-four-hour monitoring of blood pressure during calcium antagonist therapy. In: Fleckenstein A, Laragh SH, eds. *Hypertension—the Next Decade: Verapamil In Focus.* New York, NY: Churchill Livingstone; 1987:94-100. 3. Midtbø KA. Effects of long-term verapamil therapy on serum lipids and other metabolic parameters. *Am J Cardiol.* 1990;66:131-151. 4. Fagher B, Henningsen N, Hulthén L, et al. Antihypertensive and renal effects of enalapril and slow-release verapamil in essential hypertension. *Eur J Clin Pharmacol.* 1990;39(suppl 1):S41-S43. 5. Schmieder RE, Messerli FH, Garavaglia GE, et al. Cardiovascular effects of verapamil in patients with essential hypertension. *Circulation.* 1987;75:1030-1036. 6. Midtbø K, Lauve O, Hals O. No metabolic side effects of long-term treatment with verapamil in hypertension. *Angiology.* 1988;39:1025-1029.

BRIEF SUMMARY

Contraindications: Severe LV dysfunction (see *Warnings*), hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no pacemaker is present), 2nd- or 3rd-degree AV block (if no pacemaker is present), atrial flutter/fibrillation with an accessory bypass tract (eg, WPW or LGL syndromes), hypersensitivity to verapamil.

Warnings: Verapamil should be avoided in patients with severe LV dysfunction (eg, ejection fraction < 30%) or moderate to severe symptoms of cardiac failure and in patients with any degree of ventricular dysfunction if they are receiving a beta-blocker. Control milder heart failure with optimum digitalization and/or diuretics before Calan SR is used. Verapamil may occasionally produce hypotension. Elevations of liver enzymes have been reported. Several cases have been demonstrated to be produced by verapamil. Periodic monitoring of liver function in patients on verapamil is prudent. Some patients with paroxysmal and/or chronic atrial flutter/fibrillation and an accessory AV pathway (eg, WPW or LGL syndromes) have developed an increased antegrade conduction across the accessory pathway bypassing the AV node, producing a very rapid ventricular response or ventricular fibrillation after receiving I.V. verapamil (or digitalis). Because of this risk, oral verapamil is contraindicated in such patients. AV block may occur (2nd- and 3rd-degree, 0.8%). Development of marked 1st-degree block or progression to 2nd- or 3rd-degree block requires reduction in dosage or, rarely, discontinuation and institution of appropriate therapy. Sinus bradycardia, 2nd-degree AV block, sinus arrest, pulmonary edema and/or severe hypotension were seen in some critically ill patients with hypertrophic cardiomyopathy who were treated with verapamil.

Precautions: Verapamil should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdosage. Verapamil may decrease neuromuscular transmission in patients with Duchenne's muscular dystrophy and may prolong recovery from the neuromuscular blocking agent vecuronium. It may be necessary to decrease verapamil dosage in patients with attenuated neuromuscular transmission. Combined therapy with beta-adrenergic blockers and verapamil may result in additive negative effects on heart rate, atrioventricular conduction and/or cardiac contractility; there have been reports of excessive bradycardia and AV block, including complete heart block. The risks of such combined therapy may outweigh the benefits. The combination should be used only with caution and close monitoring. Decreased metoprolol and propranolol clearance may occur when either drug is administered concomitantly with verapamil. A variable effect has been seen with combined use of atenolol. Chronic verapamil treatment can increase serum digoxin levels by 50% to 75% during the first week of therapy, which can result in digitalis toxicity. In patients with hepatic cirrhosis, verapamil may reduce total body clearance and extrarenal clearance of digitoxin. The digoxin dose should be reduced when verapamil is given, and the patient carefully monitored. Verapamil will usually have an additive effect in patients receiving blood-pressure-lowering agents. Disopyramide should not be given within 48 hours before or 24 hours after verapamil administration. Concomitant use of flecainide and verapamil may have additive effects on myocardial contractility, AV conduction, and repolarization. Combined verapamil and quinidine therapy in patients with hypertrophic cardiomyopathy should be avoided, since significant hypotension may result. Concomitant use of lithium and verapamil may result in an increased sensitivity to lithium (neurotoxicity), with either no change or an increase in serum lithium levels; however, it may also result in a lowering of serum lithium levels. Patients receiving both drugs must be monitored carefully. Verapamil may increase carbamazepine concentrations during combined use. Rifampin may reduce verapamil bioavailability. Phenobarbital may increase verapamil clearance. Verapamil may increase serum levels of cyclosporin. Verapamil may inhibit the clearance and increase the plasma levels of theophylline. Concomitant use of inhalation anesthetics and calcium antagonists needs careful titration to avoid excessive cardiovascular depression. Verapamil may potentiate the activity of neuromuscular blocking agents (curare-like and depolarizing); dosage reduction may be required. There was no evidence of a carcinogenic potential of verapamil administered to rats for 2 years. A study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. Pregnancy Category C. There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. Verapamil is excreted in breast milk; therefore, nursing should be discontinued during verapamil use.

Adverse Reactions: Constipation (7.3%), dizziness (3.3%), nausea (2.7%), hypotension (2.5%), headache (2.2%), edema (1.9%), CHF, pulmonary edema (1.8%), fatigue (1.7%), dyspnea (1.4%), bradycardia: HR < 50/min (1.4%), AV block: total 1°,2°,3° (1.2%), 2° and 3° (0.8%), rash (1.2%), flushing (0.6%), elevated liver enzymes, reversible non-obstructive paralytic ileus. The following reactions, reported in 1.0% or less of patients, occurred under conditions where a causal relationship is uncertain: angina pectoris, atrioventricular dissociation, chest pain, claudication, myocardial infarction, palpitations, purpura (vasculitis), syncope, diarrhea, dry mouth, gastrointestinal distress, gingival hyperplasia, ecchymosis or bruising, cerebrovascular accident, confusion, equilibrium disorders, insomnia, muscle cramps, paresthesia, psychotic symptoms, shakiness, somnolence, arthralgia and rash, exanthema, hair loss, hyperkeratosis, macules, sweating, urticaria, Stevens-Johnson syndrome, erythema multiforme, blurred vision, gynecomastia, galactorrhea/hyperprolactinemia, increased urination, spotty menstruation, impotence.

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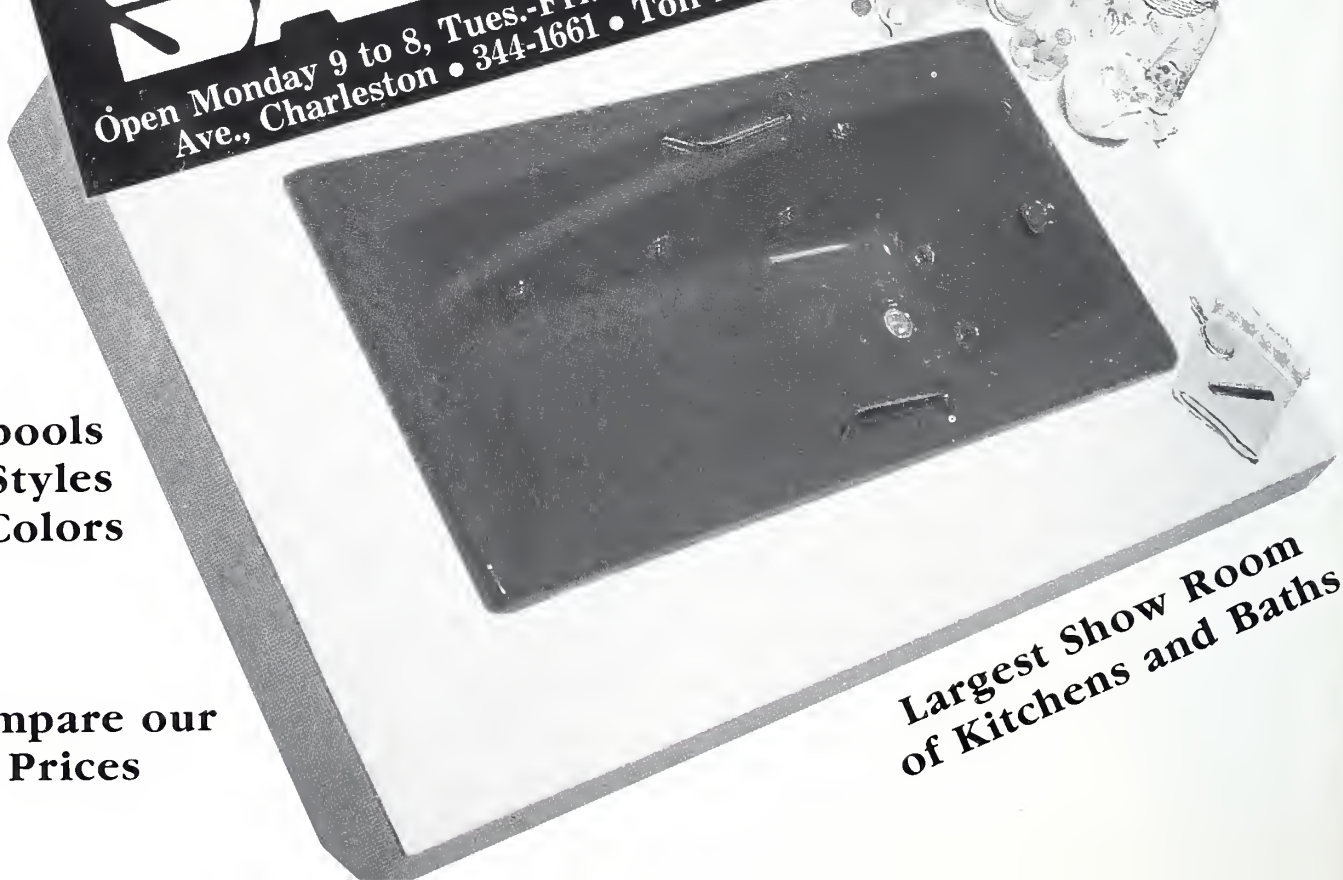

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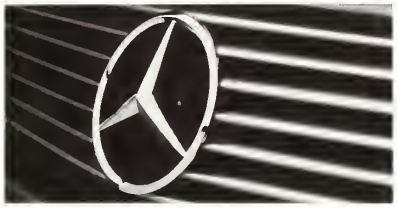

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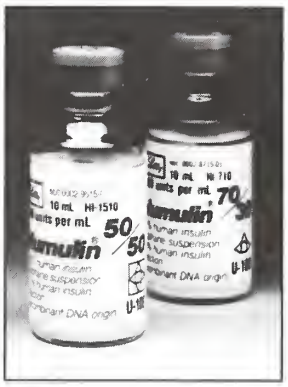

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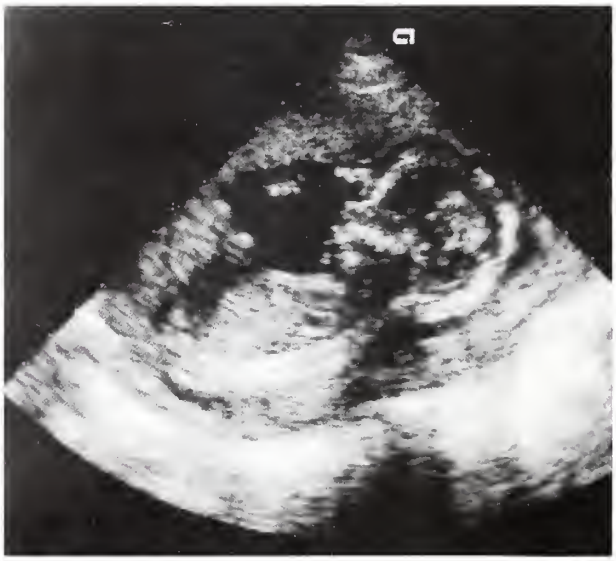

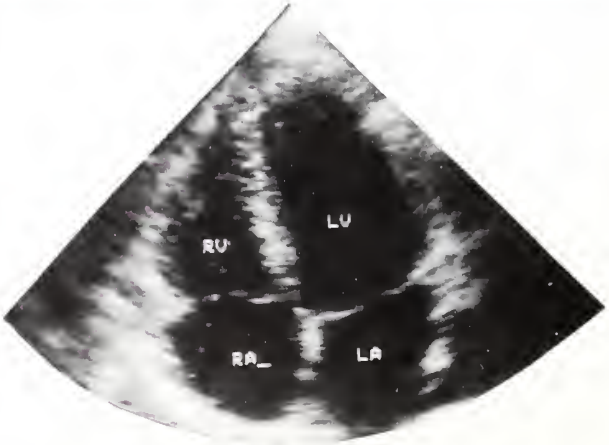

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SPECIAL SECTION

Inaugural Address

Drumbeats of Change

ROBERT P. PULLIAM, M.D.
President, West Virginia State Medical Association

If the room gets every quiet, one can hear the beat of drums -- the drumbeat of change -- the drumbeat of change in the medical care system. Sometimes it's a low rumble, and sometimes it's a crescendo, but it is always there if you listen.

As I begin this year as president of the West Virginia State Medical Association, I want to talk with you about change. Change is such a small insignificant word, but the concept and its effect are frightening, disruptive -- even revolutionary to most if not all of us. I want to look at the concept of change from a management perspective, the effects of change, the results of change, and finally the changes I will propose in the West Virginia State Medical Association for the coming year.

Change is difficult for everyone. Dostoyevsky said "taking a new step, uttering a new word is what people fear most." Even in very small and insignificant things, the new is rarely without some fear. Whether one is making widgets on an assembly line, seeing patients in one's office, or being involved in a medical association, there exists a productivity curve for change. When change is introduced, there is an immediate decline in productivity. This decline may be small or it may be severe. It occurs because new procedures, new functions, or new jobs must be learned. It often occurs because of resistance to change even if the person intuitively knows and understands that the change will be beneficial.

I frequently use the following examples to illustrate change. Most people always sleep on the same side of the bed and resist all attempts to change that habit. Try changing and you will find that you can't sleep (nor can your wife), and it's difficult to even kiss her because it is usually done from the other side of the bed.

Thirteen years ago, my medical practice decided to computerize our billing process. A new system using optical scanners was installed and worked beautifully -- except for one physician who consistently, purposely, sandbagged the system for months with irregular markings, causing the system to malfunction and employees considerably more work and frustration. Why? He didn't want change. It made him uncomfortable -- even fearful.

Following the initial decline in productivity, generally a plateau of productivity is reached and then there is a slow steady increase in productivity which hopefully reaches a level above the starting point. Where this level of productivity stops depends on a variety of factors, including the design of the change, the purpose of the change, and the process or implementation of the change. Frequently, employees depart during the change process because it's just too painful to do things in a different way.

Pressure of change may arise from either internal or external sources. The pressures for change in medicine today are almost all external. Internal pressures for change in the form of dissatisfaction with the function of the WVSMA have existed in the past. Evidence of this includes the 700 physicians in this state who are not members, many of whom have dropped membership. These physicians perceive that the WVSMA has no mission or goals. Perception of value for dues dollar is sometimes poor. Management of a non-profit membership organization is difficult to say the least. The officers change yearly and their styles and perception of their positions within the organization vary greatly. Individual county society relationships with the state organization vary greatly. Individual county society relationships with the state organization make management even more difficult since it is difficult to distinguish a chief from an indian.

WVSMA President Robert Pulliam, M.D., gestures as he stresses a point about change during his inaugural address.

In order to avoid this dissatisfaction, we must understand that there is a time for debate and differences, and a time for unity. The House of Delegates, the Council, and the Executive and other committees are the places for debate. All other places, including the public arena, are places for unity. Each of us loses debates. Not all of our positions are always accepted, but we must for the good of the whole accept these defeats, unite and move

forward. Leaving the organization because of loss of a debate or position or absence or pace of the desired change only harms the individual and the organization.

But why change? There is a formula for change that will help us understand. Change occurs if (dissatisfaction x vision x process) is greater than the cost of change. For those of you who are mathematicians, you recognize that when dissatisfaction without vision or process is greater than the cost of change, the change will be disruptive -- even revolutionary, and the results will most often be catastrophic to the organization. It is only when vision and process play an integral part in change that change becomes beneficial. I believe that a new vision exists for the WVSMA and that the process can be clearly defined.

First we -- the WVSMA and each physician member -- need to have a clear understanding of who and what we are. I have asked Ted Werblin, Jim Kessel, and Richard Kerr to design for us a new mission statement and a set of goals for the next five years. This mission statement must clearly define for us our identity. The goals must be clearly defined, easily understandable by all of us, probably obtainable and measurable. These will be presented to the Council for adoption and implementation at the November meeting.

Our constitution and bylaws have significantly hampered development. I have asked that the entire constitution and bylaws be rewritten in such way that the constitution defines broad ideas and principles, and the bylaws delineate the basics. Currently, we are unable to make a change without a long delay. The new bylaws will allow us to respond to both internal and external pressures for change at each Annual Meeting without waiting an entire year to vote on these important issues. For example, the restrictions on membership qualifications have severely hampered membership recruitment and in some cases resulted in membership loss. Our inability to recognize the need for change and/or our inability to respond to change in a rapid, appropriate manner has limited membership.

A major internal pressure for change is financial. If one critically reviews the following, it is obvious that continuing change is necessary.

YEAR	REVENUE-EXPENSES	RESERVE
1985	$18,509	$715,238
1986	$(10,497)	$704,291
1987	$3,693	$707,456
1988	$(28,453)	$710,859
1989	$(263,222)	$489,166
1990	$(168,083)	$313,911
1991	$100,696	$413,879
1992	?	?

Tax litigation, "legislative emergencies," and an increase in staff requirements explain some of the decline. I believe all would agree that the bleeding has to stop and that effective management plans must be instituted. In fact, many were instituted by Mr. Rider in 1990 with positive results. Preliminary evaluation of 1992 indicates that increased efficiency and savings continue to be achieved. Despite this recent improvement, more is needed.

"I believe that a new vision exists for the WVSMA and that the process can be clearly defined."

Our constitution currently defines no specific duties for the president-elect and vice president except to serve at the will of the president. I will ask Jim Comerci as president-elect to serve as membership chairman for the coming year and that the position carry that task in the future. The goal for membership for the coming year shall be a five percent increase in full dues paying members. The economic impact to the association of reaching that goal would be an increase of $39,000 dollars in dues revenue. This an obtainable goal if one compares potential members by county to actual current members by county. This goal can be achieved only if each county society assists by adopting individual county goals for membership. The non-economic impact of this goal has a far greater potential.

I will ask Dr. Burton as vice president to develop, in concert with staff, two programs for presentations to local societies, physicians' office staffs and others. These are essential direct membership services. These types of programs have been very successful in the past, both in attendance and in generation of non-dues revenue. I believe that high quality membership services will add significantly to the retention of old members and recruitment of new. The goal will be the creation and marketing of at least two new programs with a projected economic impact of increasing revenue by $10,000.

The Auxiliary, soon to be Alliance, is a major if not the major asset of the association. While I understand that there are some objections to granting council membership to the president of the Auxiliary, I will continue to encourage the adoption of the proposed constitutional amendment to affect that change.

Immediate refinancing of the building debt at this time of low interest rates can provide a positive cash flow increase of approximately $5,000 dollars/year.

All areas of expenditures must be carefully evaluated. There should be no sacred cows! I will propose changes to the AMA delegation in both mechanism of selection and attendance. I believe that the president, vice president and president-elect should serve as alternate delegates; that attendance at OSMAP should be limited to the current president; and that additional attendees at the meeting should limit attendance through conclusion of the reference committees. Meeting expense can be reduced by $10,000/year with adoption of these mechanisms without hampering effectiveness.

To the staff I would also propose change. I met with the staff this past week to discuss change and to emphasize that the changes I will propose are not a threat to their employment with the WVSMA, but may be a threat to their specific job description and duties. For those staff members present today, I want to re-emphasize that the changes are designed for efficiency and cost containment, and in no way should be considered as a threat to their individual employment. I will ask that the Executive Committee grant me the authority to contract with an accounting firm to have all accounting functions, including payroll, performed by an outside agency. Estimated savings to the association will be approximately $20,000

dollars per year. Other advantages include direct payroll deposit, more reliable confidentiality of payroll information and the reduced cost of the constant upgrading of the computer accounting program with attendant problems.

The *Journal* staff should be congratulated on the quality of the *Journal* and their recent successful efforts to reduce costs and increase income. I will challenge the *Journal* staff to make innovative changes in design and format to WVSMA publications and to establish a goal of a $30,000 increase in advertising revenue. Many physicians and clinics have advertised in the *Journal* for years; more of you need to do so.

There are 1,692 full dues-paying members in the WVSMA and only 203 WESPAC contributors. The average contribution per paying member is $11.50. Figures from other sources indicate chiropractors average $174, teachers average $186, and trial lawyers $283.60. Organized labor contributes 20 times the amount physicians do to political activities. Like it or not, campaign contributions are a political reality. While money does not buy votes, it does guarantee access and the willingness to listen. As a result, groups that are consistently generous with political contributions are better able to influence the process and are assured, at the very least, a voice in decisions that impact them.

There will be three physicians, one nurse, one pharmacist and several primary relatives of physicians in the West Virginia Legislature in the coming session. These people will not save us -- impact in the political arena comes through active personal and financial participation. A goal for WESPAC for the coming year shall be a 50 percent increase in membership and contributions.

I will ask the Executive Committee for the ability to reduce the number of standing committees by combining some functions and deactivating others. Generally, I believe that short-lived committees with clearly definable objectives result in far superior committee function.

Already in the planning and implementation stage are plans to reactivate the HMSS for function at the AMA level. Dr. Wayne Taylor and Dr. Nancy Webb attended the recent HMSS section of the annual AMA meeting in Chicago and were very impressed with the activities, direction and current nature of the issues debated. With the assistance of the West Virginia Hospital Association, all hospital staff officers have been identified for contact.

I will seek permission to immediately convene a coalition of health care providers -- dentists, nurses, physician assistants, pharmacists, chiropractors, etc. I can already see some frowns in the audience, but remember that all of these organizations receive health care dollars and will be impacted by the upcoming legislative session in the area of health care. Medicare now requires their participation on all committees. Many of these organizations have strong lobbying organizations. While I understand that as a coalition, we may not see eye-to-eye on every issue, a common united stance based on broad principles has many major advantages. These organizations have already been identified and an address data base developed.

The immediate establishment of a WVSMA-based speakers bureau is a viable method to increase positive physician exposure and enhance public relations and public education. I did speak this past year on request and found the public both appreciative and understanding.

Let's review the proposed changes that have or will have a financial impact:

1. Membership Recruitment	$38,250
2. Building Refinancing	$10,000
3. Accounting Change	$30,000
4. Journal Goal	$30,000
5. Travel Reduction	$10,000
6. Membership Services	$5,0000
TOTAL	$123,250

All is not savings, however, as I will recommend that $50,000 be designated to reserves; $40,000 to increase the lobbying effort; $4,000 to staff education; $5,000 to membership services development; $8,000 for equipment enhancement; and $18,000 to contingencies. With these changes, we should be able to achieve an excess revenue situation in order to continue rebuilding reserves.

Staff education is an important area of employee development and a mechanism for increased efficiency. This should be a yearly budget item. With the establishment of a viable data base and with a significant increase in cooperation with the Medical Licensing Board and other agencies, these educational advancements are necessary. Proposals for the coming year include training courses for Teresa in Advanced WordPerfect, Nancy Hill in Advanced PageMaker, and Donna Webb in Basic Data Base Management.

Finally, a word about what the president of the WVSMA is or at least my perception of the job. To staff I would say that I am not the boss, not the CEO, but that I am their slave for the year. I expect them to tell me where to go; when to go and what to say based on WVSMA policy. I have no intention of being involved in the day-to-day affairs of the office. To the members of the WVSMA I perceive that the job is to serve as a spokesman for the association's ideas and desires and to review, recommend and design changes for your consideration. Implementation of those changes will be at your will.

American physicians have long been champions of change. More change has occurred since 1900 than in all of recorded history. Much of the technology now used did not exist when I attended medical school. More recently DRG's, managed care, RVRBS, Clinical Laboratory Improvement Amendments (CLIA), OSHA requirements, the Americans with Disabilities Act and many more changes have been encountered, participated in and survived. But these changes as momentous as they seem, are only a pilot test -- warm up exercises -- for the changes that lie ahead. Physicians are concerned about the future, smart, well educated, highly motivated and ready for a challenge.

There are some people who make changes -- some people who watch changes and others who never know that changes have occurred. I would ask each of you and the members of the association who are not present to consider change and to empower me to implement those changes for you.

In the Broadway play *"Les Miserables"* there is a song I often sing. The setting is the French Revolution and the words go -- "When the beating of your heart echoes the beating of the drum, There is a life about to start when tomorrow comes." Members, listen to the drumbeat of change in the medical system, attune your heart to that beat and join me in making changes that will benefit medicine, the WVSMA, and most importantly the patients we serve.

Farewell Address

A Year of Insights

CONSTANTINO Y. AMORES, M.D.
President 1991-92, West Virginia State Medical Association

Members of the House of Delegates and guests, last year I stood before you confident of American Medicine's pre-eminence in the world order. Today, perhaps with some anxiety, I feel doubly confident we could, not we will -- but we could prevail.

It has been an interesting and memorable year for me and Diana. You have welcomed us to your county societies and opened your homes to us. Diana and I rekindled old friendships and gained new ones for which we are forever grateful -- You have enriched our lives. Looking back, we are proud to tell you that we have been to so many places, more than we thought we could manage, and yet maintained a decent neurosurgical practice.

I want to thank my partners, Drs. Alfredo Velasquez, Bob Clubb and John Schmidt, together with Dr. Curtis Withrow and Dr. Teodoro, for putting up with my absence. I also admire the talent and resourcefulness of my secretary who managed to accommodate patient demands and juggle my schedule in her most efficient way. And, of course, the staff of the WVSMA who are never wanting in their eagerness to help. Before long, I found myself in a special kinship with them, a great bunch of fellows. Thank you for making the job easier.

During his farewell address, Constantino Amores, M.D., shares one of the many lessons he learned as president of the WVSMA.

My wife, Diana, shared the job with me. She was just as presidential. Thank you for making those unfamiliar hotels, counties and cities the symblance of home. We have represented you at surrounding state medical association meetings in which we have gained insight into their failures and triumphs. We have attended the American Medical Association's meetings for a wider panorama of the contemporary status of our profession. In addition, we also were privy to non-medical gatherings which gave us a deeper feeling about how medicine is perceived by friends and foes alike.

Now, 363 days hence, I have three most cogent observations to tell you.

First, individually every physician must help maintain, protect and promote the highest standards of the medical profession to attract the brightest and most dedicated youth to the profession. Otherwise, it will be reduced to a common trade like what is happening in other countries where doctors go on strike or have a second job to survive. I have heard murmurs of going on strike amongst us, but what is really disheartening is when I personally know of two primary care physicians, in two different rural areas of our state, who are going to give up being a doctor because they could not financially support their practice and family.

We all know of colleagues who have taken early retirements, unhappy with the state of our profession. In America we should do better. Last year, I told you how crude the science of medicine is in most of the world today. Doctors dress the wound -- God heals the patient. In this country, right here in West Virginia, we transplant organs, replace hips, knees, etc. We deserve better.

Secondly, we must be a political force that is a strong and influential group with which to be reckoned. If you will stop for a moment to think, everything that is threatening the profession today was legislated. We let them do it to us -- third party payers looking over our shoulders, telling us when to admit our patients, what tests to order, which treatment is needed, and when to discharge the patient. Government is second guessing the care of our patients and, of course, has created a tort system that totally destroys the basic foundation of that here-to-fore sacred patient/doctor relationship.

Let me remind everyone that we now have a golden opportunity, for there is a window in time between now until November when we should, as a unit, work hard to get elected, those politicians who understand the cause of our profession, and in the same breath help kick out of office the politicians who have exhibited indifference to our cause in the past. They are hurting our patients. It is our job and obligation to stop them.

The third observation I am happy to report to you is that medicine as a profession is still tops. Yes, I am fully aware of the problems our profession is going through, but these are all "outside misgivings" and "misinformation."

Within the profession, you know as well as I do, WE doctors have never been this good. Where it use to take us days and days and thousands of dollars to work up and diagnose a case, now with the help of the MRI, and the CAT scan, to mention a few diagnostic tools, this is done on a outpatient basis. Not only do we get the diagnosis, but we get a better picture and better strategy on how to attack the problem and, of course, less cost. In neurosurgery alone, what did we do without the microscope, without the ultrasound aspirator which emulsifies and suctions the tumor, and without the laser with its capability of vaporizing tumors without touching or jarring the surrounding brain tissue. There are less complications, less disabilities, less suffering, less hospital stay, and, of course, less cost.

Should our patients deserve less or do the decision makers in this government understand that?

"Government is second guessing the care of our patients and, of course, has created a tort system that totally destroys the basic foundation of that here-to-fore sacred patient/doctor relationship."

As one German medical student rotating in my service told me, "It is nice in Germany because if I have a cold or a cut, all I need to do is go to the clinic, it is free. But Dr. Amores, if I get sick, really sick, I would like to be here in America." I would dare any critic of American Medicine to challenge that.

Ladies and gentlemen, as I represent you at the different functions, medical or otherwise among friends or foes alike, I can tell you without bias and reservation that I am proud of being a physician. For all its faults and what the critics have to say about our medical care system, the American people, West Virginians for that matter, enjoy the best medical care there is in the world today or there has ever been in the history of mankind.

Ladies and gentlemen, it has been a privilege and honor to serve you as your president. Goodbye.

Dr. Amores beams with pride after he is presented with a plaque to commemorate his year as president by Dr. Derrick Latos, junior councilor of the WVSMA.

Photo Highlights

Dr. Roger M. Des Prez, professor of medicine at Vanderbilt University, listens intently to a physician's question during his lecture on "The New Tuberculosis" for this year's Edmund B. Flink Address.

Governor Gaston Caperton talks with Drs. Philip Stevens, Ron Stollings and Charles McKown Jr., dean of the Marshall University School of Medicine, after delivering the Thomas L. Harris Address on "Health: West Virginia's Future."

Dr. Karl L. Myers Jr. (left) is congratulated by Dr. Constantino Y. Amores, WVSMA president 1991-1992, as he presents him with his plaque for being named WVSMA's Rural Health Physician of the Year.

Charleston attorney Vincent V. Chaney was accompanied by his wife, Jane, and their daughter, Davin Smallridge Weener, to the First General Session of the House of Delegates where he was presented with the WVSMA Presidential Citation for his outstanding contributions to health care in West Virginia.

After receiving the Wyeth-Ayerst Physician Award for Community Service, Dr. G. Robert Nugent expresses his thanks to the WVSMA members.

Dr. Robert P. Pulliam, WVSMA president 1992-93, discussed legislative issues with component society presidents and Council members attending the hospitality hour he hosted for them at the Annual Meeting.

Photo Highlights

Raymona Kinneberg, who represented the WVHA at this year's Annual Meeting, enjoys a panelist's humorous remarks during the First General Session.

Dr. Robert Pulliam addresses a question during the First General Session on "The Practice of Medicine in West Virginia After the Health Care Planning Commission." Dr. Derrick Latos (left) moderated this panel which also included Dr. Constantino Amores, Dr. Michael Stump, WVSMA Attorney Don Sensabaugh Jr., Dr. Michael Lewis, Dr. James Comerci and Dr. John Holloway.

Gubernatorial candidate Cleve Benedict (right) visited the Exhibit Hall following his speech during the First General Session and talked with many of the physicians attending the meeting, including Dr. Tom Sporck of Charleston.

Dr. Greenbrier Almond, president of the Central County Medical Society, gives a report about his society's current activities during the Component/Specialty Society Presidents Luncheon.

← Dr. Murty Bellam takes his turn at the popular basketball game which was featured at the booth shared by CNA Insurance Companies and McDonough Caperton Insurance Group.

Dr. Samuel Guy springs to return a serve in the tennis tournament.

Dr. Ed Hamrick Jr. enjoys a jog around the grounds of the Old White Golf Course with RN Leighann Withrow.

WVSMA Treasurer Dr. William Morgan intently concentrates on lining up a shot while competing in the golf tournament.

Michelle Young, public relations/advertising manager for the WVSMA, received some tips on improving her golf game from Dr. Estelito Santos, chairman of the golf tournament, and his partners Ed Hines, Dr. Manuel Franco and Tom Mitchell.

The winners of the women's tennis tournament, Grace Rosely, Sylvia Gogo, Carole Scaring and Linda Elliott, happily pose for a victory photo.

Dr. James Comerci, the new president-elect for the WVSMA, power drives the volleyball to the opposing team.

Photo Highlights

Renown trauma surgeon Dr. Howard Champion of Washington Hospital Center in Washington, D.C., was one of the panelists for the Second General Session which focused on "What's New in Trauma?"

Dr. Plaridal Tordilla and Dr. Paul Gordon proudly posed at WVU's booth after winning free attendance at one of the school's CME events in the door prize drawings which were held at the meeting.

Dr. Constantino Amores and his wife, Diana, enjoyed celebrating at the reception sponsored by CNA Insurance Companies and McDonough Caperton Insurance Group with Jean Skaggs and WVSMA staff members Sue Shanklin and Nancie Divvens.

Instructor Jerry Rose calls out steps to the couples in the ballroom dance class which was held in Colonial Hall.

Debra M. Bryant, coordinator of political action and education for the National Chapter of the American College of Emergency Physicians, was the guest speaker for the business meeting of the WV Chapter of the ACEP.

Proudly carrying two flags, Jeanny Kalaycioglu, chair of the Legislation Committee for the Harrison County Medical Society Auxiliary, models one of the many beautiful outfits that were featured during the patriotic fashion show that was presented by the Auxiliary in conjunction with the formal ball.

Wearing a stunning white gown, Shelby Neri represented the Statue of Liberty while her husband, Dr. Florencio Neri Jr., sang a moving version of "America, The Beautiful," as part of the spectacular fashion show presented by the Auxiliary.

Michele Comerci, daughter of Dr. and Mrs. James Comerci, enjoyed dancing the electric slide with her parents and the other guests attending the formal ball which featured the Bo Thorpe Orchestra.

Dr. Thomas Chang, chairman of the Annual Meeting Program Committee, and his lovely wife, Wha Ja, relax awhile after dancing at the formal ball.

Photo Highlights

At the Auxiliary's Annual Meeting, former Convention Chair Eileen Martin gets a congratulatory hug and a gift from Alice Edwards, chair of the Awards Committee, for all of her outstanding years of service.

The new Auxiliary officers were installed by AMAA President Priscilla Gerber during the Second Session of the WVSMAA's House of Delegates. The officers are (from left to right) Pacita Salon, president; Carole Scaring, president-elect; Barbara Sims, vice president; Judy Bofill, recording secretary; Vicki Helsley, treasurer; and Donna Niess, northwest regional director. Seated beside Mrs. Gerber is Emily Shelton, president of the Southern Medical Association Auxiliary.

Siromani Bellam, president of the Logan County Medical Society Auxiliary, holds the plaque that she and Trudy Tordilla (left), past president and recording secretary for the Logan County Medical Society Auxiliary, and Judy Bofill, chair of the Health Projects Committee for this society, were presented with for raising the fifth highest amount of funds for AMA-ERF of all of the auxiliaries in the nation.

AMAA President Priscilla Gerber was all smiles about celebrating her birthday at the WVSMA Auxiliary's Annual Meeting. Pictured with her are Pacita Salon, the new Auxiliary president, and Janie Altmeyer, who served as president during this past year.

Auxiliary president Janie Altmeyer enjoyed visiting with Caramine Holcomb and Mary Ann Nirchl, who represented Virginia's Auxiliary at the meeting.

WESPAC Chair Esther Weeks was the lucky recipient of one of the door prizes at this year's Auxiliary meeting.

During his inaugural address, Dr. Robert Pulliam announced that even though Dr. Constantino Amores was a very dapper dresser, it was time for a change, and he presented him with a bright red tie covered with yellow clocks.

AMA President Dr. John Clowe gave his perspective on the national political scene and the status of health care in the United States during his speech at the Second Session of the WVSMA House of Delegates.

Dr. Charles Sites, a 50-year medical graduate, and Dr. William Gilmore, a past president of the WVSMA, were among the guests honored at a special luncheon on Saturday, August 22 at the Annual Meeting.

Dr. Robert Pulliam and his wife, Katrina, celebrated his inauguration as president of the WVSMA at the reception honoring the newly installed officers of the WVSMA and Auxiliary.

New Vice President of the WVSMA Dr. Dennis Burton of Huntington, was accompanied by his wife, Kathi, to the reception for the new officers of the WVSMA and WVSMAA.

1992 Resolutions

Resolution No. 1: (adopted as amended)

WHEREAS, the current medical taxation of the state is a selective taxation to the providers of health care, and

WHEREAS, this type of taxation is a regressive taxation, and

WHEREAS, the general public's medical care is a general public obligation, therefore be it

RESOLVED, that the West Virginia State Medical Association seek ways through appropriate vehicles to ensure the tax burden for Medicaid funding is shared by all citizens of West Virginia.

Resolution No. 2: (not adopted)

WHEREAS, the Health Care Planning Commission Task Forces are a positive step in planning health care for the state of West Virginia, and

WHEREAS, there are 26 physician members who are selected from some 200 participants, and

WHEREAS, these physicians are having difficulty in attending sessions because of inadequate notice that precludes them from their attendance and input, therefore be it

RESOLVED, that the West Virginia State Medical Association go on record as noting this worthwhile project may not have the physician input desired by the governor and planners in the finished project.

Resolution No. 3: (not adopted)

WHEREAS, the West Virginia State Medical Association has outside lobbyists to handle its lobbying efforts who are trained in the field, and

WHEREAS, the current executive director of the West Virginia State Medical Association does not have that expertise, and

WHEREAS, in the coordination of the lead lobbying, West Virginia State Medical Association needs to have only one person as a spokesperson for the WVSMA, therefore be it

RESOLVED, that the West Virginia State Medical Association not allow its current executive director to participate in any lobbying efforts at the upcoming legislative session, and therefore be it further

RESOLVED, that the West Virginia State Medical Association identify that person well in advance of the legislative session.

Resolution No. 4: (adopted as amended)

WHEREAS, the concerns for the transmission of the communicable disease, from patient to physician to patient are well recognized, and

WHEREAS, the concerns for hazardous substances in the workplace are recognized and understood, and

WHEREAS, the current OSHA regulations have gone to unusual extremes far beyond what is necessary for such safety, therefore be it

RESOLVED, that the West Virginia State Medical Association protest with OSHA regarding the severity of the current OSHA regulations.

Resolution No. 5: (substitute resolution adopted)

WHEREAS, abortion is a highly visible and controversial issue, the West Virginia State Medical Association, after careful consideration, accepts the following position statement on indications for abortion for the people of West Virginia, therefore be it

RESOLVED, that the West Virginia State Medical Association adopt the following AMA policy: The issue of support or opposition to abortion is a matter for members of the WVSMA to decide individually, based on personal values or beliefs. The WVSMA will take no action which may be construed as an attempt to alter or influence the personal views of individual physicians regarding abortion procedures.

Resolution No. 6: (adopted)

WHEREAS, the West Virginia State Medical Association Medical Student Section feels that it is in the best interest of the section to have representation at the West Virginia State Medical Association and the American Medical Association annual meetings, and

WHEREAS, the Medical Student Section funds may not always be available to send a representative to these meetings, therefore be it

RESOLVED, that the West Virginia State Medical Association provide the funds to send a representative from the West Virginia State Medical Association Medical Student Section to the West Virginia State Medical Association and the American Medical Association annual meetings.

Resolution No. 7: (not adopted)

WHEREAS, the American Medical Association bylaws pertaining to medical student membership allow membership of students enrolled in an osteopathic medical school, approved by an appropriate accrediting agency, and

WHEREAS, allowing osteopathic student membership in the West Virginia State Medical Association Medical Student Section would improve relations between the medical schools and the osteopathic school, and

WHEREAS, this would provide a strong and unified voice for the medical students of the state of West Virginia, therefore be it

RESOLVED, that the West Virginia State Medical Association Medical Student Section extend membership invitations to the students of the West Virginia Osteopathic School.

Resolution No. 8: (adopted as amended)

WHEREAS, the adverse effects of the ultraviolet radiation (whether it originates from a tanning parlor or the sun) include: 1) skin cancer formation; 2) premature aging of the skin; 3) cataract formation and other eye damage including blindness; 4) impairment of the immune system; 5) photosensitizing reaction with various drugs; 6) porphyria, herpes infection, et cetera; 7) burns; and 8) DEATH, and

WHEREAS, at least one out of every six children is destined to develop a skin cancer during their lifetime; and

WHEREAS, there are 600,000 plus new cases of skin cancer each year and most of these skin cancers were preventable; and

WHEREAS, people receive 80% of their dangerous lifetime exposure to ultraviolet radiation (tanning rays) before the age of 20, and

WHEREAS, it is important to educate the students before the damage has occurred; and

WHEREAS, teachers are in an excellent position to educate their students about the hazards of ultraviolet radiation; and

WHEREAS, the American Academy of Dermatology, American Medical Association, Midwestern Congress of Dermatological Societies, and numerous other medical societies have passed resolutions to educate the public about the hazards of tanning and to develop tanning parlor legislation; and

WHEREAS, numerous cities and/or states have passed or will pass tanning parlor laws; and

WHEREAS, the Ohio State Medical Association and State Board of Education of Ohio have recently, unanimously passed resolutions to work with each other to include in the school curriculum information about the hazards of tanning; and

WHEREAS, this educational process has already begun in Ohio with the city of Hamilton being the first in the nation to include both education and legislation to protect its citizens from the hazards of tanning; therefore be it

RESOLVED, that the West Virginia State Medical Association work with the West Virginia State Board of Education to include in the curriculum appropriate information about the hazards of ultraviolet radiation; and be it further

RESOLVED, that the West Virginia State Medical Association support legislation to make tanning parlors less dangerous through better education and enforcement.

Resolution No. 9: (not adopted)

WHEREAS, a crisis exists in the area of malpractice litigation in the state of West Virginia, causing a limitation of access to health care, as well as an increase in the expenditure of health care dollars unnecessarily, therefore be it

RESOLVED, that the West Virginia State Medical Association petition the Legislature and the governor of West Virginia to enact significant health care reform using the AMA Model Medical Liability and Patient Protection Act as a template for malpractice and liability reform, and be it further

RESOLVED, that the West Virginia State Medical Association shall enjoin with business leaders, as well as other interest groups in the state, to enact significant pertinent liability and tort reform to improve the business climate in the state of West Virginia.

Resolution No. 10: (not adopted)

WHEREAS, it has been proven that the use of seat belts significantly reduces the severity and extent of injuries in motor vehicular accidents, as well as markedly decreased expenditures for health care in trauma victims, therefore be it

RESOLVED, that the West Virginia State Medical Association seeks the enactment of a mandatory seat belt law during the next session of the West Virginia Legislature to protect and improve the lives in West Virginia.

Resolution No. 11: (adopted as amended)

WHEREAS, it is a common practice in the state of West Virginia for passengers, in particular children, to ride in the back of open trucks at great risk, therefore be it

RESOLVED, that the West Virginia State Medical Association seek the enactment of a law by the West Virginia Legislature to prevent the transportation of passengers in the back of open trucks without appropriate restraints.

Resolution No. 12: (not adopted)

WHEREAS, the majority of sales from cigarette vending machines is to minors, providing them with easy access to tobacco products, therefore be it

RESOLVED, that the West Virginia State Medical Association seek enactment of laws in the West Virginia Legislature that ban the use of cigarette machines in public places to limit availability of cigarettes to minors.

Resolution No. 13: (not adopted)

WHEREAS, it is known among health care providers that a certain subset of patients abuse the health care delivery system, both in frequency and intent, causing marked increase in health expenditures as well as increased risk of malpractice litigation to the providers, therefore be it

RESOLVED, that the West Virginia State Medical Association investigate the possibility of identifying these types of patients by a central data bank, if feasible, to reduce the burden on the health care delivery system.

Resolution No. 14: (not adopted)

WHEREAS, the governor of the state of West Virginia has formed the Health Care Planning Commission to formulate a proposed plan for health care reform in the state of West Virginia; and this Commission is comprised primarily of lay members, with little knowledge of health care delivery, as well as being influenced significantly by an out-of-state consulting firm, that is unfamiliar with the present health care delivery system in this state, and that this Commission may produce a plan of health care reform that would be detrimental to the delivery and the practice of health care in the state of West Virginia, therefore be it

RESOLVED, that the West Virginia State Medical Association form a panel to produce an alternative, more realistic plan for health care reform in the state of West Virginia prior to the next legislative session.

Resolution No. 15: (adopted as amended)

WHEREAS, Acquired Immune Deficiency Syndrome is a contagious disease that effects the immune system and has protean effects on multiple organ systems, and

WHEREAS, prevention of the spread of AIDS is important due to avoidance of infected body fluids with appropriate precautions, and

WHEREAS, a health care provider has no legal way presently to order HIV testing on suspected individuals without informed consent, and that physicians should

know if a patient is HIV-Positive to limit the spread of AIDS, therefore be it

RESOLVED, that the West Virginia State Medical Association's Committee on AIDS be reactivated to study the current AIDS laws and regulations, and suggest revisions with the current medical and scientific knowledge.

Resolution No. 16: (referred to Legislative Committee)

WHEREAS, a crisis exists in the delivery and provision of health care in West Virginia, and

WHEREAS, a principal cause of this crisis is the unprecedented rise in the costs of health care and insurance, and

WHEREAS, the medical malpractice climate in West Virginia remains hostile to the practice of medicine, to wit, medical malpractice claims have increased dramatically, settlements have increased excessively in number and amount, and both the availability of affordable medicine and the recruitment of faculty and physicians are restricted, and

WHEREAS, litigation is disruptive, disastrously costly, fraught with delay and needlessly inefficient and the legal system has not addressed the crisis affecting the delivery of health care, therefore be it

RESOLVED, that the West Virginia State Medical Association: 1) request that the governor of West Virginia immediately propose legislation to require mediation as an alternative to litigation for the resolution of disputes in health care practice; 2) entreats the West Virginia Legislature to contain the costs of resolution of disputes involving health care and medical malpractice by requiring that mediation be considered as an alternative to litigation; 3) urges that the judiciary and the legal profession in West Virginia cooperate with this Association in forming a task force to implement the use of alternative methods of dispute resolution; 4) encourages medical schools, hospitals, all other health care organizations, providers and professionals to become familiar with methods of alternative dispute resolution; 5) directs its insurance carriers to adopt forthwith alternate methods of dispute resolutions in litigation cases and settlement practices.

Resolution No. 17: (adopted as amended)

WHEREAS, each year at the West Virginia State Medical Association Annual Meeting we have repeat resolutions that have been debated and resolved in years previously, and

WHEREAS, the American Medical Association and the various component sections at the national level have all developed compendiums of policy statements, therefore be it

RESOLVED, that the West Virginia State Medical Association develop a brief compendium of policies and distribute this to the various component societies throughout the state.

Resolution No. 18: (adopted as amended)

WHEREAS, family violence has been named a major public health threat by the Centers for Disease Control, and

WHEREAS, violence touches as many as one-fourth of all American families, and

WHEREAS, more than 2.4 million cases of child abuse were reported in 1989, making it one of the leading causes of injury and death in children, according to the National Committee for the Prevention of Child Abuse, and

WHEREAS, three siblings in 100 use weapons on a sister or brother, meaning that 100,000 children in the United States annually face a brother or sister with a gun or knife in hand, and

WHEREAS, as many as four million women are physically battered each year by husbands, ex-husbands and boyfriends, making domestic violence the single largest cause of injury to women in the United States, and

WHEREAS, more than one million older Americans are physically, financially and emotionally abused by their relatives each year, and

WHEREAS, the American Medical Association launched a national campaign against family violence to educate physicians about family violence and help them address the problem in their communities, and

WHEREAS, the West Virginia State Medical Association Auxiliary has elected to address family violence as their Health Project for 1992-93, therefore be it

RESOLVED, that the West Virginia State Medical Association participate in the West Virginia State Medical Association Auxiliary's campaign against family violence by recruiting physicians to join the National Coalition of Physicians Against Violence, and by helping to establish state and local medical society violence prevention committees, and be it further

RESOLVED, that the West Virginia State Medical Association support its Auxiliary by encouraging its component societies to develop programs to educate the public about the family violence problem, to support the victims of family violence, and to provide physicians with resource lists for patients who are family violence victims, and be it further

RESOLVED, that these actions be undertaken with the approval of and in cooperation with component medical societies.

Resolution No. 19: (Referred to the Finance Committee)

WHEREAS, attracting physicians to West Virginia is very difficult and expensive; and

WHEREAS, this problem is aggravated by lower Medicare payments for identical services provided by physicians in various areas of the state; and

WHEREAS, costs for providing those services are at least comparable in these areas; therefore be it

RESOLVED, the West Virginia State Medical Association urge the Health Care Financing Administration (HCFA) to change West Virginia to a single payment level, that is budget neutral, for Medicare patients for the entire state.

Resolution No. 20: (not adopted)

WHEREAS, the West Virginia State Medical Association recommended a single licensing board for allopaths and osteopaths in 1991, and

WHEREAS, this recommendation met with strong resistance from osteopaths, and

WHEREAS, it is the intent of the West Virginia State Medical Association that all physicians practicing in West Virginia have a good professional relationship, and

WHEREAS, the action in 1992, though unintentional, negatively impacted on the relationship between allopaths and osteopaths now, therefore be it

RESOLVED, that last year's action cited above be rescinded, and be it further

RESOLVED, that every effort be made by all physicians in West Virginia to work together for the benefit of the practice of medicine and our patients.

Resolution No. 21: (adopted as amended)

WHEREAS, the West Virginia State Medical Association has a vital interest in the recommendations of the West Virginia Health Care Planning Commission, and

WHEREAS, the report of that Commission is not due to the governor until December 1992, and

WHEREAS, it may be necessary to convene a special meeting of the West Virginia State Medical Association's House of Delegates to respond to the recommendations of the Commission now, therefore be it

RESOLVED, that the House of Delegates at its Annual Meeting of August 22, 1992, circulate for signature the attached petition which authorizes the president of the West Virginia State Medical Association to convene a special meeting of the House of Delegates, at such time, date and place as shall be set by the president to inform the House of the HCPC final report, and be it further

RESOLVED, that the requirements set forth in Chapter II, Section 2, of the West Virginia State Medical Association Bylaws be satisfied by this petition upon receipt of the signatures of twenty (20) delegates or fifty (50) members, representative of fifty percent (50%) of the component societies and be it further

RESOLVED, that the WVSMA formulate an appropriate response including but not limited to funding and personal considerations.

Resolution No. 22: (original resolution adopted)

WHEREAS, the American Healthcare System has traditionally been based on employer-sponsored health insurance, and

WHEREAS, there is general agreement that expansion of employer-sponsored health insurance coverage to more working West Virginians who are currently without coverage would benefit all of our state's citizens, and

WHEREAS, the economic climate in West Virginia is such that many employers would cease operations if they were to be forced to pay high health insurance premiums (or taxes) to cover all of their employees, therefore be it

RESOLVED, that the West Virginia State Medical Association intends to assume a leadership role in working with our state's business community and the insurance industry in order to promote the expansion of employer-based health coverage to as many of our citizens as possible, and be it further

RESOLVED, that in doing so, the West Virginia State Medical Association adopts the following guiding principles and considerations as starting points: a) we should advocate that if and when employers are mandated to provide coverage then eligible employees (and their dependents) must participate and help in funding the system. (This brings low risk individuals into the pool to help fund the high risks — the real concept of "insurance"); b) we should advocate a "basic level of coverage" that will be affordable by employers and will protect all of our citizens from intolerable loss from major illness or injury; c) premium sharing should be structured with recognition of the individual circumstances of the employers and the employees; d) we should advocate a sliding scale of co-payments, deductibles, etc., based on income and/or other appropriate considerations, so that consumers are encouraged to consider the value to them of services obtained, while at the same time ensuring that the burden of individuals in funding their share of out-of-pocket expenses is borne fairly; e) we should structure the coverage system so that, within reasonable limits, our citizens can arrange to have more or less than the "basic level of coverage," according to their individual needs and circumstances, their willingness to pay for more coverage, or the degree of individual responsibility for their own care they are able and/or willing to accept; f) we should require that those who voluntarily adopt unhealthy lifestyles must pay for them by sharing more of their health care cost burden; g) we should advocate tax deductions and/or credits to employers and individuals as required to help them bear the health care costs for which they must be responsible (e.g. tax-deductible "medical savings account"); h) we should insist that health insurance companies abandon predatory practices and conduct business in the light of day and within the public trust, and; i) we should eschew the idea that state government could ever run health care as effectively and efficiently as the private sector, and look at PEIA, Worker's Comp, and the Teachers' Retirement systems if we need reminded or convinced of that fact.

Resolution No. 23: (adopted)

WHEREAS, West Virginia is one of the most unhealthy states in the nation according to national standards; and

WHEREAS, unhealthy personal lifestyle accounts for a majority of premature death and disability in our state; and

WHEREAS, the Healthy WV Coalition has a plan of action to improve the lifestyle choices of West Virginians that can result in a healthier state by the year 2000, and

WHEREAS, it will require governmental policy changes and legislation to accomplish this plan; and

WHEREAS, the West Virginia State Medical Association was instrumental in the formation of and continues to play a leadership role in the Healthy WV Coalition, therefore be it

RESOLVED, that the West Virginia State Medical Association actively support the legislative agenda of the Healthy WV Coalition.

Annual Reports

Committee on Cancer

Meetings of the WVSMA's Committee on Cancer were held August 16, 1991, during the Annual Meeting at The Greenbrier in White Sulphur Spring; and during the WVSMA's Mid-Winter Clinical Conference on January 25, 1992, at the Radisson Hotel in Huntington.

At the Annual Meeting, Dr. Steven Jubelirer discussed the status of the Kanawha County Tumor Registry Project from the Charleston Area Medical Center Registry which was compiled (paper for the period 1957-1984 and computerized for the period 1985-1989), and the database was felt to be representative of Kanawha County. As of July 30, 1991, 27,839 patient records were computerized using PC-DASH software obtained from the New Mexico Tumor Registry.

The PC-DASH software was selected because of its adaptability, its user-friendly nature and no-costs acquisition due to development by federally supported projects. The West Virginia Bureau of Public Health is now using an adopted version of the PC-DASH software for the Breast and Cervical Cancer Registry which is funded by the Center for Disease Control.

Dr. Jubelirer concluded that the collected data will be analyzed to include incidence rates by year of diagnosis, by cancer site, by stages, by cell type and by geographical location within Kanawha County. This information will be reported upon at a later date.

Dr. Paul Hill reported that the National Institute for Chemical Studies will continue administrative support for the development of a viable tumor registry and provide forums for discussion, review and reporting. The final report will be available by October 1991.

Beverly Crowder reported that 11 hospitals with cancer registries in the state are participating in giving data for a Breast and Cervical Cancer Incidence Registry as a part of a recently funded cancer-control program. Other hospitals were encouraged to develop a cancer registry and to participate in this program.

Helen Fisher gave an update on the Women's Services Cancer Control Statewide Program which is funded by a federal grant. The program involves indigent and low income women and includes preventive health measures with respect to breast and cervical cancers. As of July 31, 1991, 119 health facilities were participating.

The committee members expressed support for the proposed grant by the Mary Babb Randolph Cancer Center which was submitted by Dr. Peter Raich and entitled "Interventions to Promote Application of State-of-the-Art Cancer Management in Rural Areas."

Dr. Mendoza announced that the American College of Surgeons Commission on Cancer has sent PCE (patient care evaluation) studies of invasive cervical cancer formats to hospital cancer registrars and central registries throughout the country. These studies include cases of patients initially diagnosed in 1984 and 1990.

At the committee's Mid-Winter meeting, Nancye Bazzle reported that the breast and cervical cancer screening program's medical referral system for abnormal or suspicious results involved the medical centers at CAMC, MU and WVU. These medical centers were contracted to receive program-identified women in need of further diagnosis and treatment.

Jan Devier reported that from April 1, 1991 to December 31, 1991, 6,772 West Virginia women were screened, and 5,784 clinical breast exams and 5,666 pap smears were provided.

Beverly Crowder reported that 61 hospitals in the West Virginia area are now included in the Breast and Cervical Cancer Incidence Registry and that legislation to establish a full cancer registry for West Virginia has been introduced. The committee continues to give full support to this vital legislation.

Dr. Raich reported that the Mary Babb Randolph Cancer Center's faculty and staff have been working closely with the West Virginia State Department of Health's CDC grant for statewide breast and cervix screening, providing support for public education, staff training, and assisting in setting up treatment provider networks. He added that the Cancer Information Service has been supported by the NCI since 1985, and has served West Virginia and Virginia for the past two years. They are in the process of preparing an application to provide cancer education and information services to the newly designated area to include West Virginia, Virginia and Ohio and the committee supports this program.

The WVSMA Committee on Cancer recommends that a cancer program be given to the WVSMA Education Committee for presentation at the 1993 Mid-Winter meeting. The topic suggested was - "Cancer of the Breast and Cervix" and would include the results of the West Virginia Breast and Cervical Cancer Screening Program.

Respectfully submitted,
Catalino B. Mendoza Jr., M.D.
Chairman, WVSMA Committee on Cancer

Council

The November 1991 meeting of Council took up the proposed 1992 budget for the WVSMA. The 1992 budget was approved with two additions recommended by the Executive Committee, which were approved by Council. They were to increase the WVSMAA annual grant from $4,000, to $8,000, and to add a clerical position to the office staffing.

The new membership billing procedure was explained to Council. An analysis of the impact of the increase in dues was made showing that there was an insignificant reduction in membership.

The Council approved a motion to explore the changes required in the Constitution and Bylaws to allow individuals with a degree in osteopathy (D.O.) to have active membership in the WVSMA without any restrictions.

The Council meeting of January 1992, received the report on the Mid-Winter Clinical Conference, held in Huntington. The attendance by physicians was down slightly from the previous year, but that was due to the weather, which made driving hazardous. Otherwise, this conference was highly successful.

A report was made concerning the appeal, to the West Virginia Supreme Court, of the Biswas case. Though the case was not reversed, the court did uphold the cap of $1,000,000 for non-economic damages. This resulted in a $3,500,000 reduction in the amount allowed by the lower court.

A meeting of the Council, by conference call, was held on March 31, 1992. The purpose of the meeting was to make Council aware of a proposed settlement agreement between the West Virginia Insurance Commissioner and the former Blue Cross/Blue Shield of West Virginia. The Council endorsed this agreement and thereby recommended it to the WVSMA's members.

The April meeting of the Council discussed the billing process for component society dues. Council members were encouraged to allow the WVSMA to bill for each of the component societies.

There were reports on the progress of the Health Care Planning Commission and the Physicians' Medicaid Enhancement Board.

A report was given on the action of the WESPAC Board and Candidate Selection Committee for the primary election.

An endorsement to BMW-Medtech for disposal of infectious medical waste was approved.

In summary, activities during this past year, have continued to emphasize the effectiveness of the WVSMA in matters regarding state health care policy. The Council has successfully and efficiently conducted matters of importance via conference calls. The overall operation of administrative matters of WVSMA has been improved with expansion and restructuring of the staff. The need for aggressive membership recruitment and retention activities was emphasized throughout Council meetings. Council has directed the Administration to pay even closer scrutiny to the budgetary process.

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Renal transplant and cytomegalovirus infection: Experience in a community hospital program

W. SUSIE MATULIS, M.D.
GAIL COKELEY, R.N., B.S.N.
MELISSA MATULIS
ELIZABETH FUNK, M.D.
Section of Infectious Diseases, West Virginia University School of Medicine ,Charleston Division; Renal Transplant Department, Charleston Area Medical Center, Charleston; and Section of Infectious Disease, Marshall University School of Medicine, Huntington

Abstract

Cytomegalovirus (CMV) is the most frequently occurring opportunistic pathogen and single most important infectious agent in renal transplant recipients, contributing significantly to their morbidity and mortality. Infection generally occurs in the first four months after transplant and develops in about two-thirds of these patients overall. Cytomegalovirus infection may occur as a primary disease, a reactivation, or as a superinfection and may encompass a spectrum of diseases ranging from asymptomatic to fatal.

This study reviews CMV donor and recipient status, prophylaxis, rejection episodes, immunosuppression and subsequent development of disease in 100 transplant cases in 98 patients which were performed at the charleston Area Medical Center between September 1987 and August 1991, and contrasts these findings to those from larger centers. Sixty-five recipients were positive for cytomegalovirus serologically at the time of transplantation, and of the 35 patients who were CMV negative, 20 received a kidney from a CMV-positive donor and a total of six patients have developed symptomatic disease to date.

Text

The first description of cytomegalovirus (CMV) infection was recorded in 1881, but human CMV was not isolated until 1956 (1) It was the fourth herpes virus to be sequenced. As with other herpes viruses, CMV produces a latent infection in humans that persists throughout life, with approximately 50 percent of the population infected (2).

CMV is the most frequently occurring opportunistic pathogen and the single most important infectious agent in transplant recipients. It is one of the most important causes of morbidity and mortality in this patient population. Infection generally occurs from one to four months after transplant when immunosuppression is at its highest. About 95 percent of these CMV infections occur in the first three months (3). The disease, in some form, is reportedly seen in about two-thirds of transplant patients overall when all types of transplants are considered. Although most are asymptomatic, it is now recognized that they may experience long-term complications (4).

The three basic types of infection that may be seen in transplant recipients are primary, secondary or reactivation, and superinfection. Primary infection occurs most commonly in seronegative recipients of seropositive organs and tends to have the greatest clinical impact. Secondary or reactivation infection is found in patients who were latently infected at the time of transplant. These tend to have the least clinical significance. Superinfection may occur in a seropositive recipient of a seropositive donor when the patient becomes infected with the donor virus. The disease that can develop in any of these circumstances may be mild, moderate or severe (3).

Approximately 90 percent of seronegative recipients with a seropositive cadaver kidney and 70 percent of living-related transplants with like donor-recipient serologies will get laboratory evidence of primary CMV infection. Symptoms develop in approximately 45 percent of these cases with primary infection. Another 7 percent of patients develop symptomatic disease from secondary or reactivation infection (4).

In March 1987, there were 500 patients on chronic dialysis in the Charleston, W.Va. area. Since there was not a transplant center within 150 miles of Charleston and referral to out-of-state centers was difficult, a joint venture between the Charleston Area Medical Center, a 960-bed community hospital, and the Cleveland Clinic Foundation was begun. From September 1987 through August 1991, 100 transplants in 98 patients were performed at CAMC through this program. A retrospective chart review was conducted in November and December of 1991 and serves as the basis for this study. The goal was to examine the incidence, severity, clinical presentation and risk factors for the development of disease in this transplant population.

Over the four-year period of the study, six patients developed symptomatic CMV disease, all occurring within the first five months after transplant. One patient developed CMV retinitis, one developed CMV pneumonia and the remaining four exhibited disseminated disease. Two patients were classified as having mild disease, one moderate and three severe (fatal). These numbers are actually lower than would be predicted, based on statistics of disease incidence in the literature (4).

Our series is obviously too small to have statistical significance, but it is interesting to evaluate these six patients clinically, and in relation to the current knowledge of post-transplant CMV disease. Overall, there were 59 donors and 65 recipients with positive serologies for CMV at the time of transplantation. Of the remaining 35 recipients that had negative serologies, 20 received immune globulin prophylaxis because they obtained grafts from seropositive donors (Figures 1 and 2).

Figure 1. Number of CMV positive and negative donors and recipients

CMV positive donors	- 59
CMV positive recipients	- 65
CMV negative donors	- 37
CMV negative recipients	- 35*

*20 patients given immune globulin prophylaxis due to CMV positive donor.

Figure 2. CMV status of recipients/donors

positive/positive	38
positive/negative	23
negative/positive	20
negative/negative	15

Figure 3. Presenting signs and symptoms

Fever	5 pts.
Abnormal CXR	4 pts.
Malaise	4 pts.
Hypoxia (required ventilator)	3 pts.
Multisystem complaints	3 pts.
Epigastric pain	2 pts.
Elevated liver function tests (2x normal)	2 pts.
CNS symptoms	2 pts.
Arthralgias	1 pt.
Visual complaints	1 pt.

Figure 4. CMV disease vs. donor/recipient status

Type of disease	No. of Patients	Donor	Recipient
Retinitis	1	Positive	Positive
Pneumonia	1	Negative	Positive
Disseminated disease	4	Positive	Negative

Figure 5. Distribution of post-transplant immunosuppression

Immunosuppressive Agents	Distribution Percent
Steroids	98%
Cyclosporine A	98%
Cytoxan/Imuran	80%
OKT3 (Monoclonal antibodies)	6%
ALG (Antilymphocyte Globulin)	68%

Figure 6. CMV disease vs. risk factors for rejection

Disease	Number/Type of Risk Factors	Rejection Episodes
Disseminated	none	2
Disseminated	one/previous transfusion	2
Retinitis	one/previous transfusion, PRA*	2
Disseminated	two/previous transfusion, PRA*	1
Disseminated	two/previous transfusion, PRA*	1
Pneumonia	three/previous transfusion, PRA*, diabetes	1

*PRA - Percent Reactive Antibodies

Signs and symptoms at presentation are listed in Figure 3. Fever was present in all patients except the case of isolated CMV retinitis. Malaise and an abnormal chest radiograph were each seen in two-thirds of these cases. The three patients requiring ventilatory support expired. All four patients who developed disseminated disease were CMV-serology negative recipients of a kidney from a seropositive donor, thus exhibiting primary disease. The patient who developed CMV pneumonia was seropositive at the time of transplantation. His donor organ was negative for CMV, which likely makes his disease secondary (or reactivation). The final patient developed CMV retinitis, the basis of which is uncertain since both donor and recipient were seropositive. Her disease was most likely due to superinfection from the donor virus (Figure 4).

Factors contributing to post-transplant CMV infection include the type of organ or tissue transplanted, immunosuppressive medication prior to surgery, the immunosuppressive regimen employed after transplant, underlying infections and allograft reactions (graft versus host or host versus graft disease) (3). We looked at several of these factors in relation to this transplant population.

A gradient of CMV disease morbidity based on the type of transplant has been defined from numerous studies of transplant populations. In renal transplants, as opposed to bone marrow or other solid organ transplants, the morbidity of CMV disease is generally lower (3).

Pre-transplant immunosuppression was not extensively evaluated, but there were no remarkable differences between the two groups -- those with CMV disease and those without.

Distribution of post-transplant immunosuppression in the entire transplant population is depicted in Figure 5. Of the six patients who developed CMV disease, 100 percent received prednisone and Cyclosporine A. Five of the six received azothiaprim (Imuran). Four were given anti-lymphocyte globulin immediately after transplant. The four seronegative recipients of seropositive kidneys were given immune globulin prophylaxis against CMV infection. All six patients took Acyclovir as prophylaxis against recurrent herpes simplex infection, but there has been some evidence to support Acyclovir as a prophylactic agent against CMV (3).

Cytomegalovirus infection can increase the risk of allograft rejection. Conversely, treatment for an episode of rejection with high dose immunosuppression can increase the likelihood of developing CMV disease (5). In the study population, there were 96 rejection episodes in 56 patients. Four excepted risks for rejection -- diabetes, previous transplants, previous blood transfusions, and percent of reactive antibodies were compared to actual rejection episodes in the six patients with CMV disease (Figure 6). These patients did not have a disproportionate number of risk factors or rejection episodes.

Four patients with CMV disease received cadaveric transplants and two were recipients of living-related grafts. All, however, were 3 antigen or greater mismatches between donor and recipient.

Among the many factors that contribute to the expression of CMV morbidity in the transplant recipient, immunosuppression is probably the most important single determinant of the type and severity of infection (5). Prior to the era of cytotoxic drugs for anti-rejection, CMV infection in this setting was rare. The diagnosis of CMV disease is more difficult and requires more clinical experience than does a laboratory diagnosis of CMV infection. This is especially true in the transplant population who may not respond with the expected serologic markers (6,7). Three of our six patients with CMV disease showed absolutely no change in their serologic markers for CMV infection; and of the other three patients, two exhibited rises in both CMV-IgM and CMV-IgG titers. The final patient manifested a rise in only CMV-IgM. All six patients developed positive urine and buffy coat cultures for cytomegalovirus but this was also true of other patients who did not develop the disease.

We realize that these numbers are not large enough to approach statistical significance, but will serve as a basis for ongoing study in these patients. Early conclusions we have drawn from this preliminary data are that the incidence of symptomatic cytomegalovirus disease in our transplant population falls within, or even below, national expectations (4); patients with disseminated disease have done poorly; and that our policy of routine cultures and serologic studies for detection of CMV is probably not helpful. Our goal is to become more clinically proficient in the early recognition of significant CMV disease in our renal transplant patients.

Acknowledgements

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Manuscripts to be presented for publication in *The West Virginia Medical Journal* should be prepared in accordance with "Uniform Requirements for Manuscripts Submitted to Biomedical Journals" (1) (International Committee of Medical Journal Editors).

The *West Virginia Medical Journal* will not consider for publication a paper or work that already has been reported in a published paper, or is described in a paper submitted or accepted for publication elsewhere.

Manuscripts, accompanied by one copy, should be typewritten, double-spaced, on one side only of white bond paper (8½ by 11 in.), with margins of at least one inch.

Use double spacing throughout, including (in the following order) title page, abstract, text, acknowledgements, references, tables, and legends for illustrations. Begin each of the following sections on separate pages: title page, abstract, text, acknowledgments, references, individual tables, and legends for illustrations. Number pages consecutively, beginning with the title page. Type the page number in the upper right-hand corner of each page.

All persons designated as authors should qualify for authorship. Each author should have participated sufficiently in the work to take public responsibility for the concept.

The second page should carry an abstract of no more than 150 words summarizing the manuscript.

Where reference is made to generically-designated drugs, the first such reference must be followed by parentheses containing the most commonly known trade-name drug of that designation. In addition, a listing of all generic drugs mentioned in the article, with their trade-name equivalents, should appear at the end of the article.

Tables (tabular listings) and figures (photos, drawings and charts) should be numbered and the point of reference in the text indicated in parentheses, i.e., (Table 1), (Figure 1).

Photos must be good-quality unmounted glossy prints usually 5 by 7 in. but no larger than 8 by 10 in. Black and white photos are preferred. Color photos will be printed in black and white. Cost of printing photos in excess of four will be billed to the author.

Each photo (figure) should have a label pasted on its back indicating the author's name, its number and an indication of its "top." A separate legend should be provided for each photo. Do not write on the back of photos, or scratch or mar them using paper clips. Do not mount them on cardboard. Drawings and charts should be done in solid black on pure white.

Number references consecutively in the order in which they are first mentioned in the text. Identify references in text, tables, and legends by arabic numerals (in parentheses).

No more than 25 references will be published free of charge to the author.

Use the style of references seen in this *Journal,* which is based on the formats used by the U. S. National Library of Medicine in *Index Medicus.* The titles of journals should be abbreviated according to the style used in *Index Medicus.* Consult "List of the Journals Indexed," printed annually in the January issue of *Index Medicus.*

All scientific material appearing in *The Journal* is reviewed by the Publication Committee. Manuscripts should be sent to The Editor, West Virginia Medical Journal, Box 4106, Charleston, WV 25364.

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Medical Grand Rounds

West Virginia University Health Sciences Center

Edited by Irma H. Ullrich, M.D., Professor of Medicine, Section of Endocrinology/Metabolism

Is asthma an inflammatory disease?

Discussant:
N. LeROY LAPP, M.D., F.A.C.P., F.C.C.P.
Professor of Medicine, Section of Pulmonary and Critical Care Medicine

Abstract

In the 1950s, asthma was defined in terms of reversible airflow obstruction; and then during the 1980s, the emphasis on the diagnosis and treatment of asthma centered on airway hyperreactivity. Recent advances in molecular biology and immunopathology have focused diagnosis and treatment of asthma on inflammatory mechanisms.

This article briefly reviews some of the inflammatory components of asthma and the rationale for using inhaled (topical) anti-inflammatory agents in treatment. It also calls attention to some potential and actual adverse effects of inhaled corticosteroids. It mentions some agents used as alternate therapy for "steroid resistant" patients. The alteration of airway immunopathology of asthmatics before and after use of inhaled corticosteroids is described.

There is evidence that treatment directed solely towards airway inflammation without use of inhaled B-agonist agents does not eliminate airway hyperresponsiveness.

Introduction

An article recently published in the *New England Journal of Medicine* (1) concluded that there was an increased risk of death or near death in asthma associated with the regular use of inhaled B-agonist bronchodilators, especially fenoterol. This was broadcast, as usual, by the three major television networks and aired on the evening news. As a result, many primary care physicians, pulmonologists and asthma specialists received calls from concerned patients, some of whom were threatening to abruptly stop use of inhaled bronchodilators.

This information brought into the public arena the dramatic change in therapeutic recommendations for the chronic maintenance treatment of asthma. Earlier an expert panel, constituted by the National Heart, Lung and Blood Institutes of Health had produced *Guidelines for the Diagnosis and Management of Asthma* (2). This consensus has added to the prior definition of asthma the concept of airway inflammation.

Traditionally, definitions of asthma emphasized airway obstruction. For example, the Ciba Foundation Study Group stated that "asthma refers to the condition of subjects with widespread narrowing of the bronchial airways which changes its severity over short periods of time either spontaneously or under treatment, and is not due to cardiovascular disease."

Throughout the 1980s, with the advent of bronchial challenge testing with either histamine or methacholine, the emphasis shifted toward the phenomenon of airway hyperresponsiveness as an essential part of the diagnosis of asthma. Now, the NIH Expert Panel has produced a new definition of asthma, namely, "asthma is a lung disease with the following characteristics:

1. **Airway obstruction** (or airway narrowing) that is reversible, (but not completely so in some patients), either spontaneously or with treatment.
2. **Airway hyperresponsiveness** to a variety of stimuli.
3. **"Airway inflammation"** (3).

It seems appropriate, therefore, at this time to review some of the evidence for asthma as an inflammatory disease and the implications for therapy.

Anti-inflammatory drugs

Corticosteroids have anti-inflammatory effects and some of the mechanisms by which they act are understood and others are not yet defined. In vitro, they induce the synthesis of lipocortin, a protein which inhibits the production of phospholipase A2 and this decreases the synthesis of prostaglandins, leukotrienes and platelet activating factor (PAF).

Corticosteroids may also act by inhibiting inflammatory mediator and cytokine release from basophils, eosinophils and lung macrophages, but do not affect their release by mast cells and/or neutrophils. In addition, corticosteroids reduce submucosal edema by diminishing microvascular leakage, altering the composition of airway mucus and reversing the down-regulation of pulmonary B2-adrenergic receptors (4).

Airway pathology

Prior to the advent of fiberoptic bronchoscopy and bronchoalveolar lavage, most of the data about the histology of the airways in asthma came from autopsy studies on patients who died in status asthmaticus. These characteristically showed widespread mucus plugging with inspissated secretions, edema and replacement of epithelial lining, infiltration with inflammatory cells (especially eosinophils), and hypertrophy of the muscular elements of the bronchi (5,6).

Lundgren and colleagues (7) biopsied the bronchial mucosa of six patients with intrinsic asthma and compared the results to six controls. They found normal pseudostratified epithelium and a few lymphocytes in the biopsies from the controls. In contrast, the biopsies from the asthmatics showed reduced cilia and squamous metaplasia in two, many lymphocytes, plasma cells, eosinophils and occasional polymorphonuclear leukocytes in all.

Table 1
Hyperresponsiveness and immunopathology

SUBJECTS	N	HISTOLOGY
Controls	6	5/6 No inflammation, 1/6 Few lymphocytes & macrophages 2/6 T-lymphocytes, 0/6 B-lymphocytes
Symptom-free Asthma	15	Epithelium intact to severely damaged All ↑ lymphocytes & macrophages, few eosinophils's -- no PMN's 15/15 T-lymphocytes 3/15 B=lymphocytes 10/15 CD4+ = CD8+, 5/15 CD4+ > CD8+, 5/15 CD4+/CD8+ > 10:1

Table 2

Benefits of inhaled corticosteroids

1. Improve asthma control.
2. Allow reduction or withdrawal of systemic therapy.

Risks of inhaled corticosteroids

1. Depression of hypothalamic-pituitary-adrenal axis in children and adults at doses > 800 mg./day.
2. Altered bone density in children (?) at > 400 mg./day.
3. Growth slowing in children may occur at > 400 mg./day.
4. Skin thinning and bruising increased at 400 mg./day.
5. Dysphonia common--minimized by spacers, gargling.
6. Candidiasis may be increased, reduced by gargling.

A recent study reported the results of the histology and immunopathology obtained by biopsies of the right lower lobe mucosa in 15 symptom-free asthmatics and compared these to six control subjects (8). The major findings, summarized in Table 1, were essentially no inflammatory cell infiltration in the controls, while all of the asthmatics demonstrated airway infiltration with lymphocytes, macrophages and a few eosinophils. Epithelial surface ranged from intact to severely disrupted in the asthmatics. Interestingly, polymorphonuclear leukocytes were not seen. In the asthmatics, immunohistological staining revealed a predominance of T-cells with approximately equal ratios of CD4+ and CD8+ cells, although there were several high CD4+/CD8+ ratios.

Therapy goals

The goals of the treatment of asthma have been generally enumerated as follows:

1. Maintain near "normal" pulmonary function.
2. Maintain normal activity levels.
3. Prevent recurrent exacerbations.
4. Avoid adverse effects from asthma medications (2).

Benefits of inhaled corticosteroids

It has been known for years that corticosteroids in large doses were necessary to treat patients in status asthmaticus or severe exacerbations of asthma. In the past decade, there has been a movement, especially in Europe and the United Kingdom to use inhaled corticosteroids in the maintenance therapy of asthmatics who are not in status. A recent editorial in *Thorax* has reviewed the experience in the United Kingdom with regard to the relative benefits and risks of inhaled steroids. These are summarized in Table 2 (9). Inhaled corticosteroids improve asthma control and allow reduction or withdrawal of systemic therapy. Dr. Geddes, though, has pointed out there is little data on dose-response relationships, especially for the newer, high-dose metered dose inhalers that are available in the United Kingdom, but not yet in this country.

Risks of inhaled corticosteroids

Dr. Geddes also pointed out that while the risks of inhaled corticosteroids are low, they are not negligible (Table 2).

Most authors agree that with doses of < 800 mg./day there is no detectable effect on the hypothalamic-pituitary adrenal axis in children or adults. There is no suggestive evidence from short-term studies in normals and asthmatics that changes in bone metabolism occur with 400 mg./day and increase with dose. Skin thinning and bruising appear to be increased in patients taking inhaled steriods and there is a dose-response effect. The data for doses in the 200 to 400 mg./day range do not clearly indicate a detrimental effect on growth. Some studies of doses above 400 mg./day have been associated with growth impairment. The use of high-dose inhaled corticosteroids in children is therefore clearly of concern. Dysphonia during the use of inhaled corticosteroids is common, but can usually be managed by slow inhalation, use of a spacer device, and gargling.

Maintenance therapy

Based upon review of recent studies of the role of inflammatory factors in the pathophysiology of asthma and concern about safety of B-agonist metered dose inhalers, the NIH Expert Panel (2) has recommended the early use of inhaled corticosteroids in the management of moderate asthma in adults. A summary of the NIH recommendations for adults is found in Table 3.

"Corticosteroid-resistant" patients

Some patients with asthma do not obtain appreciable benefit from the use of inhaled B-agonists, inhaled cromolyn, inhaled ipratropium, and inhaled or short-course systemic corticosteroids. These are sometimes labeled "corticosteroid resistant" asthmatics and one needs to seek alternate therapies for them.

One definition of steroid resistance is a patient who fails to show a greater than 15 percent improvement after seven days of high-dose steroid therapy (10).

Alternate therapies

Few controlled or large-scale studies have been reported of the proposed alternative therapies for patients with corticosteroid-resistant severe asthma. Those that have received some attention are presented in Table 4 and all have risks of significant adverse effects (11).

The decision to use any of these agents should not be undertaken lightly and without an adequate trial of the traditional agents.

TABLE 3

Management of Asthma–NIH

CLINICAL CHARACTER	LUNG FUNCTION	THERAPY	GOALS
Brief episodes, Asymptomatic between	≥ 80% baseline	B-agonist MDI Cromolyn MDI	Prevent symptoms during exercise or exposure to allergens
Brief attacks, < 2x month nocturnal	Varies > 20%	B-agonist q 3-4 hr PRN for duration	Control symptoms, ↓ PF variability
1-2 attacks/week Altered lifestyle, Occas emergency care	60-80% baseline PF variability 20-30%	B-agonist MDI Cortiocosteroid MDI Cromolyn MDI SR oral B-agonist SR theophylline	↓ nocturnal sx, ↓ PF variability, ↓ frequency of B-agonist MDI use
Frequent symptoms	PF varies > 30%	Short course oral corticosteroids, follow with corticosteroid MDI	↓ symptoms Stabilize PF May get specialist consultation
Continuous symptoms, Limited activity, Frequent nocturnal, Frequent ER visits	< 60% baseline, PF varies > 50%	B-agonist MDI qid Corticosteroid MDI qid, Cromolyn MDI qid Oral B-agonist Hi-dose burst corticosteroids ? daily qod steroids	↓ ER visits, ↓ exacerbations, ↓ nocturnal sx, ↓ corticosteroid bolus ↑ activity ↑ pulmonary function ↓ PF variability
"Steroid-Resistant"	< 50% baseline	? Alternate Therapy	Variable success

Modified from NIH Guidelines for Diagnosis and Management of Asthma, 1991
MDI - Metered Dose Inhaler PF - Pulmonary Function SR - Sustained Release

Table 4

Corticosteroid-Sparing Alternative Therapies

NAME	PRESUMED ACTIONS	SIDE EFFECTS	EFFICACY
Methotrexate	↓ chemotaxis ↓ LTB4, ↑↓ PMN migration ↓ phagocytosis	Hepatitis, marrow suppression, teratogen	2 studies + 1 study -
Gold	↓ LTC4, ↓ histamine release	Diarrhea, stomatitis, marrow depression, skin rash, hematuria proteinuria	1 study + 2 + side effects
Troleandomycin	↑ Half-life of methylprednisolone (specific)	Abdominal pain, hepatitis, Cushing's	2 studies + esp children
Hydroxychloroquine	↓ LT, Phospholipase A_2, ↓ histamine and O^-	Retinopathy, blood dyscrasias	1 study + open design
Dapsone	↓ O^-, PMN production ↓ chemotaxis	Hemolytic anemia, methemoglobinemia	1 study + many side effects
Immunoglobulin	Immunomodulation ???	None reported	single case report

LTB4 - Leukotriene B4 LC - Leukotrienes
LTC4 - Leukotriene C4 O^- - Superoxide abion

Studies of intrinsic asthmatics

Lundgren and associates (7) performed follow-up bronchial mucosal biopsies on six intrinsic asthmatics after 10 years of use of inhaled corticosteroids (Table 1). Compared to the earlier findings, these patients demonstrated decreased non-ciliated areas, although some focal squamous metaplasia was still present. There were only a few lymphocytes and isolated eosinophils compared to many on the biopsies taken 10 years earlier.

All of the individuals studied had hyperresponsive airways to methacholine bronchial challenge at the 10-year follow-up study. It was unfortunate that airway hyperresponsiveness was not tested at the time of the earlier biopsy. However, since they were all identified as intrinsic asthmatics, they may be assumed to have had hyperresponsive airways 10 years earlier.

This study presents some interesting observations, namely that in spite of significant reduction of the airway inflammatory component, the airway hyperresponsiveness component of the disease remained.

Conclusion

Asthma, unequivocally, has a significant component of airway inflammation. Treating that component on a chronic, maintenance basis with inhaled (topical) corticosteroids significantly alters the airway inflammation and may permit reduction or elimination of the need for systemic corticosteroids in some asthmatics.

Inhaled corticosteroids are relatively free of most, but not all, of the adverse effects seen with systemic corticosteroids. Although therapy with inhaled corticosteroids can modify the degree of airway responsiveness seen in asthma, other agents are often still necessary to treat this integral component of the disease since asthma is not only an inflammatory disease.

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The Hospital Medical Staff Section
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Highlights of the Interim Meeting will include an educational program on:

Part I:
A Futurist's Picture of Health Care 2000

A highly recognized consultant in health care issues will provide his perspective of the factors that will influence the reform of the health care system in the decades to come. Having painted a picture of Health Care 2000, the futurist will respond to questions of a reactor panel which will focus on:

- the role of organized medicine in framing the future health care delivery system,
- the role physicians will play in shaping the future and assuring adequate access to high quality health care services, and
- the impact that anticipated changes in the health care delivery system will have on the hospital medical staff's relationship with the community outside the hospital setting, including the payers.

Part II:
Physician / Hospital Organizational Models for the Future

The relation of the hospital with members of its medical staff will be substantially impacted by the forces that are shaping national health care policy and the health care delivery system of the future. The HMSS Representatives will learn:

- what some states are doing to serve as "laboratories" for alternative health care delivery systems,
- what the AMA is doing to study and advise physicians on the appropriateness of various physician / hospital organizations, and
- what one consultant anticipates will ultimately be the prognosis for organizational relationships between health care providers.

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Hospital Medical Staff Services
American Medical Association
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Hospital Medical Staff Section

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Physicians dedicated to the health of America

President's Page

Robert P. Pulliam MD.

A modest proposal

In 1989, Blue Cross/Blue Shield of West Virginia filed bankruptcy, leaving $50 million in unpaid debts. During the ensuing months, the governor requested a brief moratorium on provider billing; the book of business was obtained by Blue Cross/Blue Shield of Cleveland, and Mountain State Blue Cross/Blue Shield of Parkersburg continued the current business with no responsibility for past debts.

Multiple legal action suits were instituted by hospitals against Ohio Blue Cross/Blue Shield and national Blue Cross/Blue Shield, by providers against the same, by UMWA and Western Pennsylvania Blue Cross/Blue Shield against the liquidator and by the liquidator against UMWA. Investigations at the state and national level were commenced; Senate hearings were held; national TV exposé programs produced segments and the public was and is constantly bombarded with press releases concerning new revelations of misdeeds and chicanery. National Blue Cross/Blue Shield contributed $8+ million to the liquidators fund to escape further responsibility for the debacle.

Who are the losers and winners in this situation?

Patients, hospitals, physicians, other providers of medical services and supplies, and companies using West Virginia Blue Cross/Blue Shield as third party payors have all suffered financial losses. Blue Cross/Blue Shield has suffered significant and ongoing adverse publicity as it attempts to restructure in West Virginia and to some degree nationally. West Virginia, whose image is already less than sterling, also suffers adverse effects as bureaucratic and legislative oversight and favors continue to tarnish its image.

The winners -- the legal profession. This group had nothing to do with the medical care or with the failure, but stand to gain significantly from the myriad of suits, countersuits and legal haggling over distribution of the remaining assets of approximately $18 million.

It has now been 2+ years since the collapse, and ultimate settlement and dispersal of funds seems no closer to resolution. In fact, only this week, another lawsuit was filed and will further delay settlement. Must we continue to suffer through this situation? I think not! Consider the following "modest proposal."

Suppose all creditors agree to drop all claims as of today, and that providers would cease to demand payment from patients for services prior to the collapse. Most have written off these debts in the interval anyway. The liquidator could then contribute the $18 million to the general revenue fund of the state of West Virginia. Governor Caperton could then order that the funds be transferred to the Medicaid medical fund and used to draw down unrestricted federal matching funds on a 3-1 basis -- $54 million. Now there is $72 million in the state to provide health care. It is well known that new dollars in the economy have a multiplier effect of six times as they filter through the economy to all levels -- $432 million.

Now, who are the winners and who are the losers?

The state is a key winner because of the effect on the economy and new tax revenues. Providers are winners because of increased funds available for medical care. The health system and patients are big winners as access is increased. Mountain State Blue Cross/Blue Shield is a winner because the adverse effect of the publicity will disappear. West Virginia residents are winners because of the trickle down effect of $432 million new dollars in the economy, and specifically because we don't have to continue to be bombarded and reminded of this catastrophe.

The losers -- the legal profession because of the fees for what would have been ongoing litigation. But wait -- they are already winners!

Robert P. Pulliam, M.D.

Tort Song Tragedy

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Editors Note: *The following editorial which appeared in The Wall Street Journal on September 18 seems to define our federal legislative problems better than we could express them.*

The following editorial contains graphic political footage. Parental guidance is suggested.

The media barely noticed when the Senate killed a product-liability reform bill last week. But the story of how it died deserves to be told.

Our story begins the day after Labor Day, with reform supporters believing they have the votes to win. Senator Howell Heflin, a former Alabama trial lawyer, then declares in the Senate Democratic Caucus that "Jews, labor unions and trial lawyers" are the Democratic Party's three most important financial supporters. The Senators cannot afford to let the trial lawyers down by passing a bill they oppose, he tells his colleagues.

(Mr. Heflin tells us: "The weekly Democratic Party Caucus is closed to the press and Members are pledged to keep confidential discussions that take place there...In no way did political contributions influence my vote." Of course not.)

Senate Majority Leader George Mitchell agrees and proceeds to lead a filibuster that means the bill requires 60 votes to pass. Yet supporters still appear to have the votes, as several dissenting Democrats argue that single, national standard for product liability would bring sanity to a runaway legal system. Joe Lieberman, a pro-growth Democrat from Connecticut, points out that Abbott Labs has dropped plans to test an anti-AIDS drug because of liability concerns. The gallery senses an upset victory.

Enter Goliath, a.k.a., Thomas "Tommy" Boggs, Beltway maestro for the Association of Trail Lawyers of America. Mr. Boggs is walking proof that Democrats and trial lawyers are joined at the hip. He is a partner in the same Beltway law firm as Democratic party chairman Ron Brown – Patton, Boggs & Blow – and is known for his contacts and fund-raising. He is the son of the late Congressional powerhouse, Hale Boggs, and his sister is Cokie Roberts, the liberal ABC-TV commentator.

From 1987 to 1992, Mr. Boggs himself donated $108,937 to a variety of Democratic candidates, according to Federal Election Commission records. (Beltway lawyering is lucrative.) More important, Mr. Boggs's donations usually trigger a cascade of other political giving from trial lawyers, their spouses and even children – a terrific way to end run the $1,000 spending limit on individual donations. Mr. Boggs's wife, Barbara, has given $34,900 to candidates, including $1,000 each to such tort-reform opponents as Senators Howard Metzenbaum and Fritz Hollings.

So on the day of the Senate vote, Mr. Boggs strikes a powerful pose as he parks himself in a room just off the Senate floor. There he huddles with other anti-reformers who include such self-styled consumerists as Pamela Gilbert of Ralph Nader's coalition. (Ms. Gilbert refuses to disclose if trial lawyers finance her organization.) The Boggs anti-reform lobby is in touch with Senators and their aides.

The vote to end the filibuster commences and it's a cliffhanger. Tort Song Tommy and Senator Mitchell still need to turn one more vote. Mr. Mitchell is seen approaching Claiborne Pell, who declines, then John Glenn, who shakes his head no. The Majority Leader then talks to Nebraska's Bob Kerrey.

In a rare Senate procedural gambit, Mr. Kerrey agrees to "pair" his vote with an absent Senator, meaning it isn't formally recorded. Mr. Kerrey tells us he agreed to pair so the Senate could move beyond the contentious debate and "we could get something done this year." In any event, the gambit denies supporters the 60th vote they need to end the filibuster. The reform effort dies.

Reform supporters are nonetheless elated they came so close after years of not even being allowed a vote, and they vow to try again next year. But Mr. Boggs is working, too. The trial-lawyer network is pouring millions into Bill Clinton's campaign in the expectation that a President Clinton would obediently veto any product-liability reform.

As for the Senate, the trial-lawyers' number one target is Wisconsin Republican Bob Kasten, a product-liability reform leader. They're pouring contributions into his Democratic opponent, Russ Feingold. And some people still wonder why Americans are fed up with Washington.

Guest Editorial

A Call To Arms

The task forces of the Health Care Planning Commission (HCPC) have completed their work. There were task forces on Basic Services, Health Service Systems, Finance and Cost Control, Health Professions, Quality of Care and Practice Liability and finally on Certificate of Need. Several physicians served on these task forces along with other West Virginia citizens. We entered the process with the idea that the best alternatives to achieve the assigned goals would be determined in a democratic way at the task force level, and that these would be endorsed by the HCPC and presented to the 1993 Legislature.

Perhaps that will happen as planned. On the other hand, perhaps political pressures will supplant the hard work of the HCPC and its task forces. Whichever way this evolves, rest assured that the West Virginia State Medical Association leadership (many of whom served on these task forces) will keep you informed of the HCPC's plans and of your role during this crucial year. As the issues become more clear, specific position statements and suggested approaches to the Legislature will be provided for each of you.

The practice of medicine in West Virginia will likely change dramatically over the next few years. Your direct participation in the planning and political process will be essential to make this change constructive rather than destructive. If there are physicians in your county who are not members of the WVSMA, please recruit them to join. We need every physician, every physician's family members, and every physician's friend to influence the myriad of proposals which will confront the Legislature.

Start now to prepare for this process by reading the task force reports which are available through the Health Care Planning Commission's office at (304) 558-0530. The ideas which arrive at the Legislative Interim Committees to ultimately become entered as bills may be quite different than we expect. We will keep you abreast of these activities. It will require your reading time and attention, but it will be worth every minute if we can mount an effective campaign that looks to the needs of our patients.

The WVSMA is the only organization that represents you as a physician in West Virginia. This year, especially, you must know that, believe that, and act upon that.

David Z. Myerberg, M.D.

Dr. Myerberg is a member of the Liability and Quality of Care Task Force of the West Virginia Health Care Planning Commission and a member of the WVSMA Legislative Committee.

On November 3,

Remember

576!

Soon, your practice could be run from here.

Most people agree that the U.S. health care system needs significant change. And if a single-payor, national system is adopted, it will change.

Some proposals under consideration would put the government in charge of America's health care. That kind of radical change could affect your freedom to make decisions in administering patient care. It could affect the way you're compensated. And how you use medical technology.

If you find these kinds of changes hard to swallow, maybe you should support a proposal that will build on what's good about America's health care system. And change what's not. A plan like Health Access America.

Developed by the American Medical Association, Health Access America was designed to preserve the integrity of the system while improving programs like Medicare and Medicaid, and requiring employer-sponsored health plans.

So while there's still time, speak for yourself. Join the AMA's call for reform. Call 1-800-AMA-3211 for more information on Health Access America.

Health Access America

The AMA proposal to improve access to affordable, quality health care.

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At Mid-Winter

Second session to focus on pros/cons of cancer screening testing, psychotropic drugs

The topics to be highlighted for the Controversies in Medicine Session at the West Virginia State Medical Association's 26th Mid-Winter Clinical Conference, January 22-25, will include "Cancer Screening Testing: Should We or Shouldn't We?" and "Psychotropic Drugs." These two subjects will be explored during the Second Scientific Session, which will take place on Saturday, January 23 at 9 a.m., at the Charleston House - Holiday Inn, the site for all meetings and events for this year's conference.

Presenting their views on cancer screening testing will be **Roxanne Powers, M.D.**, associate professor of medicine at West Virginia University, and **Shawn Chillag, M.D.**, associate professor and chairman of the Department of Medicine at WVU, Charleston Division. Following their discussion, **John R. Vanin, M.D.**, associate professor of psychiatry and family practice at WVU, will speak on "Psychotropics: The Right Stuff?" Giving the opposing view will be **Lee L. Neilan, M.D.**, of Charleston, whose topic will be "Psychotropics (Without the Right Stuff)."

Biographical information about these speakers begins below and additional details about this year's Mid-Winter Clinical Conference are available by contacting Nancie Divvens at 925-0342. A registration form for the meeting will be printed in next month's *Journal*.

Powers

Chillag

Vanin

Neilan

Panelists highlighted

Dr. Powers received her medical degree from WVU in 1976 and then remained at the school for another two years to complete an internship and residency. For her second year of residency, she relocated to Winston-Salem, N.C., for training with the Bowman Gray School of Medicine at North Carolina Baptist Hospital.

In 1979, Dr. Powers returned to WVU to become an instructor in the Department of Medicine. The following year she was promoted to assistant professor, and then in 1985 was elevated to associate professor. Dr. Powers was named acting section chief of General Internal Medicine in 1987 and the next year accepted her current role as section chief. In addition to her post as section chief, Dr. Powers recently received full professor status.

A fellow of the American College of Physicians, Dr. Powers is also a member of the Society of General Internal Medicine and the American Geriatrics Society. Named the Department of Medicine's "Outstanding Faculty for 1987-88," Dr. Powers is currently involved in five research projects at WVU.

Dr. Chillag was born in Holden, W.Va., and graduated from WVU with his doctor of medicine degree in 1973. He completed an internship at Charleston Area Medical Center and then returned to Morgantown for two years of residency in medicine. In 1976, Dr. Chillag worked on a fellowship in the Pulmonary Department at WVU; and then the following year he was able to be a clinical assistant for a month at Stobhill General Hospital in Glasgow, Scotland, and be a visiting fellow for three months at the Jewish Institute for Geriatric Care in New Hyde Park, N.Y.

Joining the WVU faculty in 1977 as an assistant professor, Dr. Chillag was also named section chief of the Division of General Internal Medicine in 1978. In 1980, he went into private practice for two years in Logan at Guyan Valley Hospital before accepting a position at the University of South Carolina as an assistant professor in the Department of Family Medicine.

After six years at the University of South Carolina, during which time he also held faculty positions in the school's Department of Internal Medicine, Dr. Chillag returned to WVU in 1988 to accept his current post as associate professor and chairman of the Department of Medicine, Charleston Division.

Dr. Chillag has been bestowed numerous honors during his career, including being named Clinician of the Year three times at WVU, where he also received the Award for Excellence in Teaching from the Department of Medicine in 1989. A fellow of the American College of Physicians, he has written nearly 50 articles and abstracts.

Dr. Vanin is a native of Morgantown who received his medical degree from WVU in 1977. He completed an internship in psychiatry and internal medicine at WVU, as well as residencies in psychiatry and family practice.

From 1981-85, Dr. Vanin served as a medical officer for the U.S. Air Force, obtaining the rank of major. Following his military service, Dr. Vanin returned to West Virginia to work as a psychiatric consultant at Valley Community Mental Health Center in Kingwood and Grafton, and be an active provisional member of the Emergency Room staff at United Hospital Center. In 1980, Dr. Vanin became a psychiatric consultant at Appalachian Regional Mental Health Center in Clarksburg and coordinator of WVU resident scheduling for the

Emergency Room at United Hospital Center.

The following year, Dr. Vanin relocated to Shreveport, La., to become chief of the Mental Health Clinic at Barksdale Air Force Base and also work as a psychiatric consultant at Shreveport Mental Health Center. In 1983, he moved to Ohio to work as an attending staff psychiatrist at Wright Patterson Air Force Base and teach psychiatry at Wright State University.

After two years at Wright Patterson, Dr. Vanin again returned to WVU, this time to accept a position as assistant professor in the Departments of Behavioral Medicine, Psychiatry and Family Practice. In 1989, he was named to his current role as associate professor for these three departments and became a staff psychiatrist for WVU at Chestnut Ridge Hospital. In addition, Dr. Vanin is also now on the staff of Ruby Memorial Hospital, is the appointed medical consultant for Monongalia County Jail Advisory Board, and is the medical student advisor for the WVU School of Medicine.

Active on many WVU committees, Dr. Vanin is also president-elect of the West Virginia Psychiatric Association and a member of the WVSMA and the Monongalia Medical Society. A noted lecturer, he has spoken extensively at conferences in the United States and throughout West Virginia.

Dr. Neilan was born in Washington, D.C., and obtained her medical degree from Georgetown University Medical School in 1976. She completed a residency in internal medicine at The Providence Hospital in Washington and then did a psychiatric residency at the Georgetown University Department of Psychiatry.

In 1978, Dr. Neilan relocated to Charleston to become a resident in the Department of Behavioral Medicine and Psychiatry at CAMC and WVU. The following year she took on additional duties as a psychiatrist on the staff of Huntington Staff Hospital, and then after completing her residency, began working part time at Shawnee Hills Community Mental Health Mental Retardation Center in addition to having her private practice.

Since 1980, Dr. Neilan has devoted herself to her private practice and is on the active staff at CAMC, St. Francis Hospital, Highland Hospital and Thomas Memorial Hospital. In addition, she currently serves as an assistant clinical professor at WVU in the Department of Behavioral Medicine and Psychiatry and is a board member for the YWCA Resolve Family Abuse Program.

A fellow of the American Psychiatric Association, Dr. Neilan is currently president of the West Virginia Psychiatric Association and a member of the American Academy of Psychiatry and the Law, the Academy of Psychosomatic Medicine, the AMA, the WVSMA and the Kanawha County Medical Society.

WVSMA treasurer named president-elect of Otosclerosis Study Group

Morgan

WVSMA Treasurer Dr. William C Morgan Jr., a Charleston otologist, has been elected president-elect of the Otosclerosis Study Group at their recent annual meeting. This organization, consisting of 100 international members, was organized to exchange ideas and promote research for those interested in otosclerosis.

A clinical professor in the Department of Otolaryngology at WVU since 1981, Dr. Morgan also currently serves as chief of otolaryngology at St. Francis Hospital. In private practice since 1979, he is a former chief of otology at The Eye and Ear Clinic, Inc. of Charleston and is a past chief of otolaryngology at CAMC.

Active in many national and state professional organizations, Dr. Morgan is a member of the Medical Aspects of Noise Subcommittee for the American Academy of Otolaryngology-Head and Neck Surgery, Inc., and also serves as the public education representative for the state of West Virginia for this organization. He is a member of the AMA, the American College of Surgeons, the American Laryngological, Rhinological, and Otological Society, the American Neurotology Society, the Southern Medical Association and the Kanawha Medical Society.

A past president of the West Virginia Academy of Ophthalmology and Otolaryngology, Dr. Morgan has served as treasurer of the WVSMA since 1986.

Orlando site for primary care physicians' conference in November

Primary care physicians will learn how to better address patients' psychiatric needs at the conference, "Emerging Issues in Primary Healthcare," which will be held in Orlando, Fla., November 12-15, at the Grand Cypress Resort. This conference is sponsored by the University of South Florida College of Medicine in cooperation with the Medical Education Network, Inc.

Up to 30 hours of Category 1 credit for the PRA of the AMA, and 30 prescribed AAFP hours can be earned at the conference, which is also approved by the CFPC. Topics such as AIDS, aging, sleep disorders, chronic pain, women's health, endocrinology, gastroenterology, cardiovascular and pulmonary medicine, neurology, hypertension, weight reduction and smoking cessation will be discussed by faculty from Harvard, Stanford, Cornell, University of California, Albert Einstein, University of South Florida and other educational institutions.

To register, receive a conference brochure or obtain more details, call the Medical Education Network, Inc. at (800) 832-0779.

Lim receives national otolaryngology award

Lim

Romeo Y. Lim, M.D., an otolaryngologist-head and neck surgeon in Charleston, was among 23 otolaryngologist-head and neck surgeons nationwide to receive the American Academy of Otolaryngology-Head and Neck Surgery's prestigious Honor Award. Dr. Lim received the award at the opening ceremony of the 96th Annual Meeting of the Annual Academy of Otolaryngology-Head and Neck Surgery held September 13-17 in Washington, D.C.

Bestowed since 1934, the Honor Award recognizes those who have contributed service to the Academy without renumeration, such as presentation of an instruction course or scientific paper, or participation on a continuing education committee or faculty. A point system is the basis for granting the award. No more than two points can be earned per year, and a total of 10 points is required. With the inclusion of the 1992 recipients, over 100 Academy members have received the Honor Award.

Dr. Lim has been a fellow of the American Academy of Otolaryngology-Head and Neck Surgery since 1967. He is also a fellow of the American College of Surgeons, the American Society for Head and Neck Surgery and the American Society of Laser Medicine and Surgery.

A clinical professor of otolaryngology/head and neck surgery, and general surgery at the WVU Health Sciences Center in Charleston, Dr. Lim is also the surgeon in charge of head and neck surgery for CAMC. He has been chief of surgery at The Eye and Ear Clinic, Inc. of Charleston since 1972.

Book Review

INNOVATIONS '92

Innovations '92 is a publication of The American College of Physician Executives, an organization of over 6,500 physicians involved in medical management, As an organization interested in both cost and quality of health care, it attempted to uncover examples of innovative approaches to the management of health care costs and approaches to improving health care quality. This project was assisted with funding Merck, Sharpe & Dohme and The Travelers Companies.

Included in this publication are 172 articles summarizing approaches used by individuals and institutions to control health care costs without sacrificing quality. The book is divided into three sections — cost management, medical quality/cost management, and medical quality management. Each article has a succinct abstract of the pertinent issues covered.

The subject matter on a whole is well presented and authors come from various sections of the health care field, including nursing, pharmacy, social work, health care administrators as well as physicians. It is an excellent reference book for all individuals involved in the management of the delicate balance of health care costs and quality.

Donald H. Hofreuter, M.D., F.A.C.P.E.

Attendance excellent at Surgery meeting

Dr. Donald Trunkey, M.D., professor and chairman of the Department of Surgery at Oregon Health Sciences University in Portland, Ore., and Howard R. Champion, M.D., chief of trauma service and director of Surgical Critical Care and Emergency Services at Washington Hospital Center in Washington, D.C., were the two featured speakers at the Surgery Section Breakfast Meeting which was held on Friday, August 21 during the WVSMA Annual Meeting.

Dr. Thomas Chang chaired the meeting which was attended by 22 physicians, and introduced the two renown trauma specialists. He conducted an open question and answer period with Drs. Trunkey and Champion and 10 different subjects were covered in the discussion.

Dr. Chang noted the excellent attendance at the meeting and announced that the next Surgery Section meeting will be held at the WVSMA's Mid-Winter Clinical Conference in Charleston, January 22-24. This meeting will be open to all registered participants at the Mid-Winter Clinical Conference.

Services available for visually-impaired seniors

The West Virginia Division of Rehabilitation Services has received a grant from the U.S. Department of Education/Rehabilitation Services Administration to provide independent living services to older persons who are blind or severely visually impaired. The agency works cooperatively with the state's Centers for Independent Living and the Commission on Aging.

The goal of the program is to enable blind or visually impaired senior citizens to achieve a greater degree of independence in their homes and communities, especially in regard to basic skills which are essential for daily living. Training may be provided in areas such as communications, orientation and mobility, home management, and other techniques which have been adapted for independent living.

For more information about the program, phone 1-800-642-3021 from 8:45 a.m. to 4:45 p.m.

The Nationwide Insurance's Medicare Electronic Media Claims (EMC) School

is offering a one-day program featuring a series of classes on proper electronic claims filing, how to get started with EMC billing, and innovative, new products that are available to providers.

Wednesday, November 11, 1992

from 8:30 a.m. to 4:30 p.m.

at

Holiday Inn - Parkersburg, WV
(304) 485-6200

Classes in:

- Surgeries & Modifiers
- Chemo & Injection & Modifiers
- Radiology & Modifiers
- Introduction to EMC & New EMC Products
- Professional Provider Terminal Network (PPTN) & Courtesy Software Demonstration

Seating limited to 150 people. For reservations, please call (614) 249-9018

*The Appropriation Bill of 1993 was signed into law extending the payment hold requirement for paper claims. The bill will change the payment hold for paper claims from 14 days to 27 days. Electronic billers will continue to be paid within 14 days; therefore, electronic billing will become even more important to providers in the future.

Continuing Medical Education

Listed on this page are some of the upcoming CME programs which will be held in the state.

The programs this month were compiled by: Robin Rector, coordinator for CME for Charleston Area Medical Center; Kari Long, program director of CME and rural services for WVU; and Thelma Wilson, education coordinator for Raleigh County Medical Society.

Futher details about these CME activities may be obtained by calling Rector at 348-9580; Long at 293-3937; and Wilson at 255-6341.

If you would like to have the CME programs offered by your institution or association for physicians printed in the *Journal,* please contact Nancy Hill, managing editor, at 925-0342.

CAMC/WVU Health Sciences Center - Charleston

Nov. 7 - "Laser Surgery Seminar IX," Eye and Ear Clinic, Inc. of Charleston and Dept. of Surgery, WVU Health Sciences Center (sponsors), Charleston Marriott

WVU Health Sciences Center - Morgantown

Nov. 7 - "1992 Appalachian Regional Stroke Symposium"*

Nov. 13-15 - "Third Annual Surgeon General's Follow-up Conference for Children With Special Needs," Canaan Valley State Park, Davis

Nov. 20-21 - "2nd Annual N. Leroy Lapp, M.D. Teaching Days"

** Held in conjunction with a home football game*

Raleigh County Medical Society - Beckley

Oct. 27 - "NIH Guidelines to Asthma," Charles Porterfield, D.O., 6:30 p.m.*

Nov. 2 - "Intra-aortic Balloon Pumping in the Community Hospital Setting," Robert C. Touchon, M.D., Raleigh General Hospital, 7 p.m.

Nov. 5 - "TBA, Jack L. Cox, M.D., 6:30 p.m.*

Nov. 10 - "Developments in Peptic Ulcer Disease," Husan Nazer, M.D., 6:30 p.m.*

Nov. 17 - "Renal Issues in Hypertension," Kemaljit Sethi, M.D., 6:30 p.m.*

Dec. 3 - "Hypertension in the Elderly: More Than a Numbers Game," Thomas von Dohlen, M.D., 6:30 p.m.*

**Held at Black Knight Country Club*

Outreach Programs

Key to Sponsors

★ *WVU Health Sciences Center, Morgantown*

☐ *CAMC/WVU Health Sciences Center, Charleston*

Fairmont ★ Fairmont Clinic, Nov. 18, "Pediatric Dermatology, "Ellen Jacobsen, M.D.

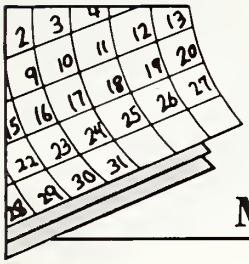
Fairmont ★ Fairmont General Hospital, Nov. 3, 7:30 p.m., "AIDS and the Medical Practitioners Ethics," Bruce Weinstein, Ph.D.

New Martinsville ★ Wetzel County Hospital, Nov. 12, 11:30 a.m., "Pain Control," Peter Raich, M.D.

Philippi ★ Broaddus Hospital Association, Nov. 12, 7 p.m., "Lumbar and Cervical Discs," Howard Kaufman, M.D.

White Sulphur Springs ★ The Greenbrier Clinic, Nov. 23, 4 p.m., "Lumbar and Cervical Discs," T. Glenn Pait, M.D.

"OUR LITTLE DOCTOR TRIED TO PERFORM A VASECTOMY ON TIMMY DAWKINS."



Medical Meetings

October

29-Nov. 1—39th Annual Meeting of the Academy of Psychosomatic Medicine, San Diego
30—Third Annual Rush Symposium on Hepatic and Biliary Disease, Sections of Digestive Diseases and Transplantation at Rush-Presbyterian-St. Luke's Medical Center (sponsors), Chicago
31—Challenges in Hypertension, Georgetown University Medical Center (sponsor), Chicago

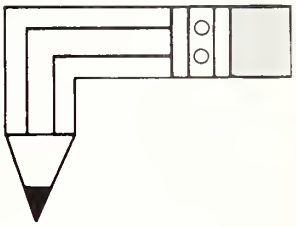
November

1-5—Imaging Perspectives '92: MRI, Nuclear Medicine, Ultrasound and Breast Health, AOCR (sponsor), San Diego
2—The CV System, PharmaDesign Training (sponsor), Philadelphia
5—Joining a Partnership or Group Practice, AMA (sponsor), Chicago
6-7—40th Annual Detroit Trauma Symposium, Harper Hospital (sponsor), Detroit
6-7—Practice Management in Neurology, American Academy of Neurology (sponsor), Chicago
6-7—Starting Your Practice, AMA (sponsor), Chicago
7—Laser Surgery Seminar IX, Eye and Ear Clinic of Charleston, Dept. of Surgery, WVU Health Sciences Center (sponsor), Charleston
7—Financial Strategies for Successful Retirement for Mid-Career Physicians, AMA (sponsor), New York City
8-12—American Academy of Ophthalmology, Dallas
12-15—86th Annual Scientific Assembly of the Southern Medical Association, San Antonio, Texas
12-15—Emerging Issues in Primary Healthcare, University of South Florida College of Medicine in Cooperation with Medical Education Network, Inc. (sponsors), Orlando, Fla.
13-15—Anxiety Disorders: Psychological and Pharmacological Treatments, Ohio State University (sponsor), Columbus
13-15—6th Annual Family Practice Weekend and Sports Medicine Conference, West Virginia Chapter/American Academy of Family Physicians (sponsor), Huntington
21-22—Advanced Trauma Life Support Student™ Course, Georgetown University Medical Center (sponsor), Washington, D.C.

For More Information . . .

Contact the Journal at (304) 925-0342 for additional information about most of the above meetings.

Poetry Corner



After Surgery

My nurse friend told me
that during a hysterectomy
they stretch your guts out
like so much laundry hung to dry.

I picture,
flapping in the sterilized air,
hyperplasia-filled uterus
clotheslined to endometriosis-covered
ovary strung to carcinoma-encapsulated
appendix tip. Then, the surgeon,
like a washwoman, unpins
diseased organs and packs them for pathology.

As carelessly as a boy stuffing
clean clothes into his bureau drawer,
the doctor plops remaining entrails
into the open cavity. For days,
these rumble, hiss, and vibrate as,
like salmon, they seek their birthplaces.
My friend, I do not find this comforting.
A god-doctor carefully positioning
saved parts satisfies my need to control;
guts noisily fighting for their natural places
sustain my fear that I have none.

Wilma Stanley Acree, Parkersburg

Please address your submissions for Poetry Corner to: Stephen D. Ward, M.D., Editor, West Virginia Medical Journal, Box 4106, Charleston, WV 25364.

This page of material is submitted and paid for by the Bureau of Public Health.

Program encourages working mothers to keep breastfeeding

Through a cooperative effort of Pendleton County's Hanover Shoe Factory and the WIC Program, the special supplemental food program for women, mothers returning to work are now getting help and support from their employer to breastfeed their babies.

In its efforts to increase breastfeeding promotion and education, the Randolph/Elkins WIC Program has teamed with Hanover Shoe management and a company nurse to establish in the factories, private areas equipped with electric breastpumps for breastfeeding clients who are returning to work. The breastpumps, loaned by WIC, allow mothers to express and save their own milk while they are away from their babies. Pumping will help mothers give their babies the very best nutrition while still being employed outside the home. The Medela electric pumps are designed to increase the speed and efficiency of pumping, allowing mothers to return to the work line quickly.

Hanover, which is a major employer in Pendleton County, and WIC are making this effort to promote healthy mothers and babies through increased awareness of the benefits of breastfeeding. Statistics prove that breastfed infants have fewer illnesses and require fewer doctor visits. Hanover management benefits from this because these employed mothers require less sick leave.

This program was so well received at the pilot factory site that Hanover management has purchased a second electric pump and is considering establishing another breastfeeding room at its second factory location. Development of this project earned the Randolph/Elkins WIC Program an award for Breastfeeding Program in the Workplace from the Mid Atlantic Regional office of the Federal WIC Program.

Breastfeeding is being promoted by WIC in accordance with the Surgeon General's goal that 75 percent of all babies will be breastfed by the year 2000.

Baby friendly hospital initiative underway

Recently, as part of the follow-up to the 1990 World Summit of Children, the United Nations Children's Fund (UNICEF) asked the U.S. government to take national leadership in promoting its Baby Friendly Hospital Initiative.

The BFHI is an international campaign launched in 1991 by UNICEF and the World Health Organization to help hospitals institute practices which support breastfeeding. In the 12 counties that have already launched a compaign, hospitals that implement the "10 Steps to Becoming a Baby Friendly Hospital" are awarded a "Baby Friendly Hospital" seal.

Healthy Mothers, Healthy Babies (HMHB) -- a national coalition of maternal and child health organizations with chapters in every state -- has agreed to be the lead organization for the Baby Friendly Hospital Initiative in the United States. HMHB proposes to do a three-year study to determine to most effective means of implementing the BFHI in the United States and improving education and support for breastfeeding in U.S. hospitals.

Factors that influence hospital practices will be studied in order to design strategies to alter these practices. These factors would include attitudes and knowledge of professional staff; the cost to hospitals of any changes; and activities of the infant formula industry. In West Virginia, the Charleston Area Medical Center's Women and Children's Hospital has taken the lead in adopting the 10 baby friendly guidelines.

The 10 Steps to Becoming a Baby Friendly Hospital are as follows:

1. Have a written breastfeeding policy.
2. Train all health staff to implement this policy.
3. Inform all pregnant women about the benefits of breastfeeding.
4. Help mothers initiate breastfeeding within half an hour of birth.
5. Show mothers the best way to breastfeed.
6. Give breastfed newborns no food or drink other than breast milk, unless medically indicated.
7. Practice "rooming in" by allowing mothers and babies to remain together 24 hours a day.
8. Encourage breastfeeding on demand.
9. Give no artificial teats, pacifiers, dummies or soothers.
10. Help start breastfeeding support groups and refer mothers to them.

For more information on the Baby Friendly Hospital Initiative, contact Nancy Hillen at HMHB, 346-5908, or Connie Neuner, WV WIC Program, 558-0030.

16th EMS conference to be held at Canaan

The Sixteenth Annual Conference on Emergency Medical Services, "EMS-Home Among the Hills," is scheduled for October 22-23 at Canaan Valley Resort in Davis. Participants include public officials, EMS program directors, medical advisors, administrators, EMS instructors, emergency medical technicians, paramedics and nurses.

Topics to be presented include "Basic 12 Lead EKG;" "Incident Command for EMS;" "Basic Burn Management;" "Basic Techniques in High Angle Rescue;" "Thrombolytic Therapy;" "Electrical Hazards for EMS Personnel;" "Establishing DNR Protocols;" "Infection Control Policies and Procedures;" "Limiting Muscular Damage During a Myocardial Infarction;" "EMS for Mass Gatherings;" "The Role of EMS in Research;" "Approach to Violent Patient and Provider Safety;" "Safety and Survival Skills for EMS Personnel;" and "Changes to AHA's BCLS and ACLS Standards."

Any questions should be directed to Carla Zando in the Office of Emergency Medical Services at 558-3956.

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WEST VIRGINIA UNIVERSITY HEALTH SCIENCES CENTER

Compiled from material furnished by the West Virginia University Health Sciences Center, Communications Division, Morgantown.

Nugent receives Wyeth-Ayerst award for community service

Nugent

Dr. G. Robert Nugent, professor and chair emeritus of neurosurgery, was recently honored with the Wyeth-Ayerst Physician Award for Community Service at the annual meeting of the West Virginia State Medical Association. The award recognizes a West Virginia physician who has contributed outstanding community service for residents of the state.

Dr. Nugent came to WVU in 1961, and became chair of the Department of Neurosurgery in 1970, a position he retained for over 15 years. Dr. Nugent is internationally known for his pioneering work in surgically relieving the symptoms of trigeminal neuralgia, an intense facial pain. He has performed over 1,500 such procedures.

Tinnin, Bills present symposium at meeting in Amsterdam

Dr. Louis Tinnin, associate professor of behavioral medicine and psychiatry, and Dr. Lyndra Bills, resident in behavioral medicine and psychiatry, presented a symposium, "Video Therapy and Post-Traumatic Stress Disorder," at the World Conference of the International Society for Traumatic Stress Studies, June 21-26 in Amsterdam, the Netherlands.

In addition, Dr. Tinnin and Dr. Bills helped present two posters. The first, "Outpatient Management of the Dissociative Patient," was given with M. L. Merroto, R.N.; and the second, "Memory Shrapnel in Treatment-Resistant PTSD," was presented with Dr. Carmen Pinto, resident.

Wax presents abstracts at Canadian conference

Wax

Dr. Mark Wax, assistant professor of otolaryngology, recently presented four abstracts at the 47th Annual Canadian Society of Otolaryngology Meeting in Quebec, Canada.

The abstracts Dr. Wax gave included the rule of sternotomy in head and neck surgery; management of the difficult airway; the lateral and free flap as an alternative to the radical forearm free flap; and tuberculosis of the larynx in children. The prinicipal author of the laryngeal tuberculosis abstract, Dr. Hassan Ramadan, assistant professor of otolaryngology, was unable to attend the meeting.

Rosas joins rural outreach effort

Dr. J. Fernando Rosas, assistant professor of pediatrics, is making regular visits to four West Virginia towns as part of the WVU School of Medicine's rural outreach program.

Dr. Rosas, who joined WVU in August, will spend about 40 hours a week seeing patients in Franklin, Blacksville, Grafton, and Rowlesburg to provide specialized pediatric care and expand the availability of pediatric services in these areas.

Nath elected to AADE board of directors' post

Charlotte Reese Nath, R.N., Ed.D., C.D.E., associate professor of family medicine, has been elected to a three-year term on the national board of directors of the American Association of Diabetes Educators (AADE), which has more than 7,000 members.

Dr. Nath, one of 12 directors elected to the board, is past president of the West Virginia chapter of AADE and vice chair of the West Virginia Diabetes Advisory Committee.

Faculty promotions, tenures announced

Promotions

Mary Ann Antonelli, M.D., Assoc. Prof. (SM), Medicine
James G. Arbogast, M.D., Prof., Family Medicine
Daniel Banks, M.D., Prof., Medicine
Fredrick Blum, M.D., Assoc. Prof. (SM), Surgery and Pediatrics
Mark A. Borsch, M.D., Assoc. Prof. (SM), Medicine
Samuel J. Congello, D.O., Asst. Prof., Medicine
John M. Connors, Ph.D., Assoc Prof., Physiology
Michael E. Cunningham, M.D., Assoc. Prof. (SM), Radiology
Richard D. Dey, Ph.D., Prof., Anatomy
Nick Ghaphery, D.O., Adj. Asst. Prof., Family Medicine
Chet D. Johnson, M.D., Assoc. Prof. (SM), Pediatrics
John Kizer, M.D., Asst. Prof., Surgery
Joseph H. Liput, M.D., Assoc. Prof. (SM), Medicine
Jyoti Patel, M.D., Asst. Prof. (SM), Family Medicine
Kathleen Previll, M.D., Assoc. Prof. (SM), Pediatrics
Susan K. Ritchie, M.P.H., P.N.P., Assoc. Prof. (SM), Pediatrics
A. Kim Ritchie, M.D., Prof., Pediatrics
Richard J. Seime, Ph.D., Prof. (SM), Behav. Med. and Psych.
Roxann Powers, M.D., Prof., Medicine
John Rogers, M.D., Prof., Medicine
Singanallur N. Jagannathan, Ph.D., Prof., Pathology
J. David Blaha, M.D., Prof., Orthopedics
Stanley D. Yokota, Ph.D., Assoc. Prof., Physiology
Vincent Gerencser, Ph.D., Prof., Microbiology

Tenures Granted

Stephen C. Arnoff, M.D., Assoc. Prof., Pediatrics and Microbiology/Immunology
Lynn Broadman, M.D., Prof., Anesthesiology
John M. Connors, Ph.D., Assoc. Prof., Physiology
Stanley Einzig, M.D., Prof., Pediatric Cardiology
John Linberg, M.D., Assoc. Professor, Ophthalmology
Stanley Yakota, Ph.D., Assoc. Professor, Physiology
John Barnett, Ph.D., Professor, Microbiology/Immunology

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Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalmic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon® is indicated as a sympathicolytic and mydriatric. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.[1,2] Also dizziness, headache, skin flushing reported when used orally.[1,3]

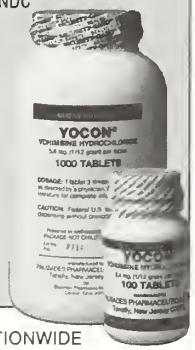
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.[1,3,4] 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to ½ tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.[3]

How Supplied: Oral tablets of Yocon® 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:

1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

Rev. 1/85



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Marshall University School of Medicine

Compiled from material furnished by the Office of University Relations, Marshall University, Huntington.

Six students to receive specialized rural medical training

Beginning in November, six Marshall University medical students will be working alongside rural doctors in outpatient offices and hospitals in five communities as part of the school's expanded Rural Physician Associate Program.

In its third year of operation, the program was recently expanded due to support form the state's Rural Health Initiative and consists of nine months of study to help students learn the skills of rural medicine by living its day-to-day realities. Participating communities and students are as follows:

- Hurricane: Medical student Bradley Richardson of Bluefield, Va., will work with Dr. Charles Bukovinsky;
- Milton: A. Betts Carpenter of Pittsburgh will work with Dr. David Ayers;
- Wayne: Rhonda Scites Ross of Wayne and Paula Larsen of Kenova will work with Dr. Michael Kilkenny;
- Hamlin: John Turley of Charleston will work with Dr. Greg Elkins;
- Scarbro: Timothy Cook of Huntington will work with Dr. Daniel Doyle.

The RPAP program has proved popular with students and communities alike, according to Dr. Linda Savory, assistant dean for curriculum and evaluation at Marshall.

"Students say they like the variety of problems they deal with from day to day, as well as the chance to follow a certain set of patients on an ongoing basis," Dr. Savory said. "This program gives students a real taste of rural medical practice and increases their chances of having a successful rural practice of their own."

Diabetes program, instructor gain national certification

The patient education program of the Marshall University School of Medicine Diabetes Center has received certification from the American Diabetes Association, and Pamela White, R.N., has earned the title of certified diabetes educator from the National Certification Board for Diabetes Educators.

The Marshall program makes Huntington the only other city in West Virginia besides Parkersburg that has a recognized patient education program. The recognition assures that the program meets the national standards for diabetes patient education developed by the National Diabetes Advisory Board, a creation of the Department of Health and Human Services.

Variety of events set for Alumni Weekend

The sixth annual Alumni Weekend of the Marshall University School of Medicine will be held October 9 and 10 in Huntington.

This year's activities will include the 10-year reunion of the Class of 1982 and the five-year reunion of the Class of 1987. Events open to all alumni and faculty include a mixer hosted by Dr. Patrick I. Brown, continuing medical education grand rounds, a homecoming luncheon, and a tailgate party preceding Marshall's football game against Furman University.

Dr. John Walden will provide the keynote address at 11:45 a.m. Saturday at the Radisson Hotel, speaking about his recent participation in the Rio Roosevelt expedition in the Brazilian rain forest. In other events, Dr. David Heydinger will be awarded honorary membership in the school's Alumni Association.

More information is available from Peggy Theis, 696-7246.

Awards presented to 14 students, 3 faculty

Fourteen medical students and three faculty members were honored during opening exercises for the School of Medicine.

Student academic honors went to Eric R. Heinz of Proctorville; Kevin S. McCann of Chapmanville; Mark R. Ziegler of Huntington; Caroline E. Miller of Hurricane; Tammy L. Nagy of Hurricane; Alicia D. Pauley of Huntington; James B. Becker of Ceredo, Mary Beth Harler of Glen Dale; Patricia J. Wilson of Huntington; and Cheryl M. Kirk of Chillicothe, Ohio.

Students newly elected to Alpha Omega Alpha, the international medical honorary, were Mary Beth Harler; Brian Francis of Williamson; Paul S. Holley of Gerry, N.Y.; Stephen M. Ross of Dover, Del.; and Rebecca B. Young of Roanoke, Va.

Dr. Terry Fenger, associate professor of biology, was named professor of the year by the outgoing second-year class, which also honored the Department of Pharmacology. Dr. James Fix, professor of anatomy and cell biology, and Dr. Susan DeMesquita, associate professor of physiology, were named the outstanding professors of the year by the outgoing first-year class.

Surgery professor featured in French teleconference

Dr. Lorenzo Gonzalez-Lavin of the Marshall University School of Medicine was one of 11 surgeons on the faculty of a heart valve implantation teleconference September 17 and 18 in Marseilles, France.

Dr. Gonzalez-Lavin, a professor of surgery, is an authority on replacing damaged heart valves with donated human valves. The conference, which focused on human replacement valves, also featured surgeons from Belgium, England, Germany, Spain and France.

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W. E. Noble, M. D.

Rheumatology
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G. Galvin, M. D.
E. Cohen, M. D.

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Auxiliary News

An issue we must all address

Family violence is the leading cause of injury to women ages 15-44; violence will occur at least once in two-thirds of all marriages; family violence occurs among all races and socioeconomic groups; one out of three girls and one out of five boys will be sexually abused by the time she or he is 18 years old - - 50 percent of the time by the natural father.

These are shocking facts that many of us would like to ignore because family violence is something that is ugly and dirty. Even though we may as physicians and auxilians find it difficult to understand the causes of this problem, we must become aware of the facts surrounding family violence and work to make others aware of this issue.

The West Virginia State Medical Association Auxiliary has declared family violence one of its health awareness priorities for the year. The Auxiliary has joined in the coalition effort to educate the public about the dangers of family violence, making them aware of the signs that can lead to abuse with the hope of preventing violence.

I recently presented a video provided by the AMA Auxiliary to the Raleigh County Board of Education. The video is a cartoon targeted for students that shows various forms of violence that children and adults view on TV. Throughout the brief video, news clips of violence are shown and heard. Ann Wrenn, WVSMAA's field director from the AMAA, stated at our September Leadership Confluence that many students who have seen the video reacted without emotion. Ask anyone who watched the video at the Leadership Confluence - - it definitely raises your emotions, or at least it should.

That is precisely why we must pursue this project with all our hearts. Complacency is part of our problem. It is time we make people aware that they have no right to harm their spouse.

The WVSMA adopted a resolution at their Annual Meeting in August supporting the Auxiliary's fight against domestic violence. With that in mind, I hope we are able to convince all WVSMA members to adopt and practice the AMA's physician protocols on family violence. There are many signs physicians can look for, especially in emergency rooms, that are characteristic of abuse, such as chronic headaches, insomnia, chest, back and/or pelvic pains. These signs may be reason enough to ask if the person has been abused.

Additionally, the Auxiliary is in the process of drafting a resolution to encourage legislation be proposed that would mandate that couples who apply for a marriage license be in some way educated on the effects of family violence, the signs to look for in an abusive personality, as well as the laws relating to family violence. They would have to sign an agreement stating they understand the responsibilities of marriage. The agreement will be filed with the license.

During Health Awareness Week, November 16-20, many of the county auxiliaries have devoted the week to increasing awareness about family violence.

In Ohio County, Michael Fortunato, M.D., will speak on "Panic Attacks and Stress;" Bruce Walmsley, M.D., is scheduled to talk on "Rules Regarding the Reporting of Violence;" and Ronald Paolina, M.D., will address the subject of "Management and the Treatment Following Violence."

Cabell County is currently working with a local shelter in providing toiletries and other necessities to the occupants.

The Logan County Auxiliary is working with their local community in a coalition effort to increase awareness by having a forum on family violence that will be televised November 10 at 7 p.m.

Monongalia County plans to distribute information packets regarding family violence to physicians' offices.

The Raleigh County Auxiliary will hold a forum on family violence on November 16 at Glade Springs. Two CME credit hours will be offered.

This is our opportunity to make a difference in somebody's life. "Educate to Prevent" is our goal. Always remember - - race, education, religious beliefs or economic status are not barriers to preventing family violence. It can happen to all of us.

Pacita Salon
WVSMAA President

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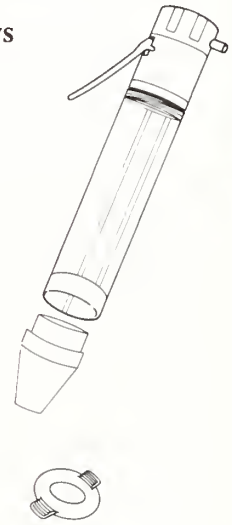

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Obituaries

Bill Robert Blackburn, M.D.

Bill Robert Blackburn, M.D., a resident of Elkins, died August 19 in his home. He was 69. He was born July 29, 1923, at Denison, Texas, a son of the late Dave E. and Zola MacRouth Blackburn.

Dr. Blackburn was a graduate of Victoria High School in Victoria, Texas, and received his bachelor of science degree at the University of Texas at Austin. He received his medical degree at Bayor Medical College in Houston, and served his internship and residency at the Erlanger Hospital in Chattanooga, Tenn.

Following his residency, Dr. Blackburn served for one year as co-chief resident at Baylor University College of Medicine. From 1954 to 1959, Dr. Blackburn worked in private practice and served as an assistant surgical instructor at Baylor.

Dr. Blackburn joined the staff of Memorial General Hospital in 1959 and became chief of surgery in 1962. Later, he became medical director of the Elkins Regional Convalescent Center and remained there until he retired in 1989.

Dr. Blackburn was a U.S. Navy veteran of World War II. In addition to his membership in the WVSMA, Dr. Blackburn was a member of the American Medical Association, the Tygarts Valley Medical Society, and the West Virginia Chapter of the American College of Surgeons. He was a past member of Elkins Lodge #1135 and the Kiwanis Club of Elkins.

Surviving are his wife, Eleanor Barbara Blackburn; two sons, D. Scott Blackburn of Salisbury, Md., and R. Randall Blackburn of Clarksburg; one daughter, B. Allyn Blackburn of Newport News, Va.; one sister, Virginia B. Ferguson of Austin, Texas; and four grandchildren.

He was preceded in death by one brother, David R. Blackburn.

George T. Hoylman, M.D.

George T. Hoylman, M.D., of Gassaway, died August 19 after a long illness. He was 78. Dr. Hoylman, the son of the late Joseph and Alma Maude Hedrick Hoylman, was born December 5, 1913, in Coalton.

Dr. Hoylman graduated from Buckhannon High School and received a bachelor of science degree from West Virginia Wesleyan College and a master's degree in zoology from West Virginia University. He obtained a medical degree from West Virginia University and The Medical College of Virginia in Richmond in 1949. Dr. Hoylman was an intern at Charleston General Hospital.

Dr. Hoylman established his practice in Gassaway and was a partner in the Gassaway Hospital. In 1974, he served as the county health physician for several years and provided medical care while on two missionary trips to Haiti.

Dr. Hoylman served as president of the Central West Virginia Medical Society.

Surviving are his wife, Alta Bennett Hoylman; two daughters, Carol Sue Cunningham of St. Charles, Ill., and Vera Hoylman, M.D., of Charleston; brothers, Joseph and Richard of Charleston; sisters, Virginia McClure of Gassaway, Mary Louis Mott of Philadelphia, Pa., and Helen Frances White of Rochester, N.Y.; grandchildren, Mark, Joy and Jay Cunningham and Susan and Sarah Ayoubi; and several nieces and nephews.

William T. Booher, M.D.

William T. Booher, M.D., 84, died September 5 at Country Haven Nursing Home in Beech Bottom. He was born in Bethany, a son of the late Dr. William and Mary Schoot Booher.

Dr. Booher graduated from the Northwestern University Medical School in 1933. He was an Army veteran of World War II and received a bronze star for serving as an infantry combat physician.

In his early medical career, Dr. Booher was also a public health physician and coroner in Brooke County. He established his family practice in 1933 and worked in Wellsburg until retiring in 1978.

A member of the WVSMA since 1936, Dr. Booher was also a member of the American Medical Association and the Brooke County Medical Society.

Surviving are his wife, Mertie McQuiston Booher; one son, Dr. William Booher Jr. of Wellsburg; one sister, Virginia Gaines of Wellsburg; four grandchildren and five great grandchildren.

HEALTH CORNER

Doctors Should Care For People With HIV

By James S. Todd, M.D.

(NU) - As the AIDS crisis escalates, so does the confusion about the ethical responsibilities of physicians to provide care for HIV-infected individuals.

Many people who learn they are infected with HIV, the virus that causes AIDS, worry that they will be unable to find physicians willing to treat them. However, individuals with HIV have the same rights to medical care as anyone else.

The American Medical Association has adopted specific policies, outlined in the association's Code of Medical Ethics, to address this important issue. According to this policy, people infected with HIV are entitled to quality medical services and the safeguard of privacy within legal constraints. This means that physicians should protect individuals with AIDS or those infected with the virus from discrimination based on fear, prejudice or their medical condition.

Physicians should treat patients whose conditions are within their current expertise. If physicians are unable to provide the necessary care, they should refer patients to those physicians or facilities equipped to provide such services.

In other words, a person's HIV status should have no effect on his or her ability to obtain appropriate medical care. Individuals with HIV should expect the same quality of care from their physicians that they have always received.

The first principle of medical ethics states that physicians shall be dedicated to providing competent medical service with compassion and respect for human dignity. That principle applies to all patients regardless of their disease.

(James S. Todd, M.D., is a general surgeon and executive vice president of the American Medical Association.)

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Annual Audit 1991

The annual audit of the West Virginia State Medical Association for the calendar year 1991 has been completed by Ernst & Young of Charleston. The complete audited financial statements including the report of independent auditors is as follows:

REPORT OF INDEPENDENT AUDITORS

To the Council
West Virginia State Medical Association

We have audited the accompanying balance sheets of West Virginia State Medical Association (WVSMA) as of December 31, 1991 and 1990, and the related statements of revenues and expenses—unrestricted fund, changes in fund balances, and cash flows—unrestricted fund for the years then ended. These financial statements are the responsibility of the Association's management. Our responsibility is to express an opinion on these statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of WVSMA at December 31, 1991 and 1990, and the results of its operations and its cash flows for the years then ended in conformity with generally accepted accounting principles.

April 29, 1992

Ernst & Young

BALANCE SHEETS
WVSMA

UNRESTRICTED FUND	December 31 1991	1990
ASSETS		
Cash and cash equivalents	$ 645,982	$ 194,872
Investments (market $206,082 and cost $200,035 as of December 31, 1991 and 1990)—Note A	200,035	193,917
Accounts receivable	49,078	28,225
Other assets	9,433	1,306
Land, building, and equipment, net—Note B	662,467	696,427
	$1,566,995	$1,114,747
LIABILITIES		
Dues collected in advance	$ 524,156	$ 157,980
Medical scholarship obligation	13,663	16,663
Accounts payable	28,393	12,985
Accrued income taxes payable—Note G	12,538	18,329
Accrued expenses and other liabilities	39,055	63,581
Note payable to bank—Note D	514,198	525,021
	1,132,003	794,559
FUND BALANCES		
Undesignated	434,992	313,911
Designated for professional liability education—Note A		12,395
Unrealized depreciation on equity securities		(6,118)
	434,992	320,188
	$1,566,995	$1,114,747
RESTRICTED FUND—NOTE A		
ASSET		
Investment in common stock	$ 4,250	$ 4,250
FUND BALANCE		
Endowment	$ 4,250	$ 4,250

See notes to financial statements.

STATEMENTS OF REVENUES AND EXPENSES—UNRESTRICTED FUND — WVSMA

	Year Ended December 31 1991	1990
REVENUES		
Dues	$ 778,750	$ 552,881
Professional liability services—Note F	140,000	140,000
Contributions:		
Legislative	100,085	
Conferences and meetings	24,404	16,353
Interest and investment	41,813	42,351
Exhibit space income	27,613	41,300
Advertising	58,663	45,388
Registration fee income	43,860	22,145
Management fee income	20,000	
IC Systems commission income	7,821	8,637
Other revenues, including grants from Endowment Fund of $1,504 and $1,472 in 1991 and 1990	11,441	20,574
TOTAL REVENUES	1,254,450	889,629
EXPENSES		
Salaries and wages	316,680	294,583
Legislative	100,085	
Interest expense—Notes D and G	51,710	61,301
Publishing and printing	89,772	105,454
Convention speakers and supplies	94,839	91,137
Legal and accounting	66,667	57,955
Travel	70,632	80,370
Malpractice	28,046	23,550
Employee benefits—Note H	79,704	61,882
Depreciation and amortization	36,657	47,964
Postage	29,160	29,456
Payroll taxes	23,557	23,232
Office supplies	15,616	23,163
Telephone	18,552	17,200
President's stipend	5,000	20,000
Bad debt expense		15,000
Property taxes	10,717	8,806
Liability insurance	7,299	8,955
Medical students'/residents' subsidies	6,296	11,205
Computer repairs and maintenance	6,757	6,885
Utilities	6,721	6,634
Other expenses	90,250	86,738
Refund of expenses	(8,953)	(23,803)
TOTAL EXPENSES—NET	1,145,764	1,057,667
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENSES BEFORE TAXES	108,686	(168,038)
Federal and state income tax provision—Note G		7,217
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENSES	$ 108,686	$ (175,255)

See notes to financial statements.

STATEMENTS OF CHANGES IN FUND BALANCES
WVSMA

	Unrestricted Fund	Restricted Endowment Fund
Balance at December 31, 1989	$ 495,443	$ 4,250
(Deficiency) excess of revenues over expenses	(175,255)	1,408
Grant to unrestricted fund		(1,408)
Balance at December 31, 1990	320,188	4,250
Change in unrealized loss on equity securities	6,118	
Excess of revenues over expenses	108,686	1,472
Grant to unrestricted fund		(1,472)
Balance at December 31, 1991	$ 434,992	$ 4,250

See notes to financial statements.

STATEMENTS OF CASH FLOWS—UNRESTRICTED FUND —WVSMA

	Year Ended December 31 1991	1990
OPERATING ACTIVITIES		
Excess (deficiency) of revenues over expenses	$ 108,686	$ (175,255)
Adjustments to reconcile excess (deficiency) of revenues over expenses to net cash provided by (used in) operating activities:		
Depreciation and amortization	36,657	47,964
Provision for bad debt expense		15,000
(Increase) in accounts and notes receivable	(20,853)	(20,000)
(Increase) decrease in other assets	(8,127)	5,408
Increase (decrease) in State and American Medical Association dues collected in advance	366,176	(33,950)
(Decrease) in income taxes payable	(5,791)	(96,148)
(Decrease) in accrued interest payable		(55,500)
(Decrease) in medical scholarship obligations	(3,000)	(7,500)
Increase (decrease) in accounts payable	15,408	(20,844)
(Decrease) in accrued expenses and other liabilities	(24,526)	(11,292)
NET CASH PROVIDED BY (USED IN) OPERATING ACTIVITIES	464,630	(352,117)
INVESTING ACTIVITIES		
Purchases of equipment	(2,697)	(18,738)
NET CASH (USED IN) INVESTING ACTIVITIES	(2,697)	(18,738)
FINANCING ACTIVITIES		
Net proceeds from refinancing note payable to bank		14,979
Repayment of note payable to bank	(10,823)	(14,979)
NET CASH (USED IN) FINANCING ACTIVITIES	(10,823)	
INCREASE (DECREASE) IN CASH	451,110	(370,855)
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	194,872	565,727
CASH AND CASH EQUIVALENTS AT END OF YEAR	$ 645,982	$ 194,872

See notes to financial statements.

NOTES TO FINANCIAL STATEMENTS — WVSMA

December 31, 1991

NOTE A—SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Cash and Cash Equivalents: Cash and cash equivalents are comprised of short-term certificates of deposit recorded at cost, which approximates market.

Investments: Investments consist of approximately 17,300 shares of a Federated GNMA Trust which are stated at the lower of cost or market value. There were no sales of investments in 1991 or 1990. In 1990, a valuation allowance in the amount of $6,118 was established by a charge directly to fund balance to reduce the carrying amount of the noncurrent equity security to market, which was lower than cost at December 31, 1990. At December 31, 1991, the gross unrealized gain pertaining to the equity security was $6,046. Gross unrealized securities gains and losses through April 29, 1992, are not material.

Land, Building and Equipment: Land, building, and equipment are recorded at historical cost. Depreciation is computed by the straight-line method using estimated useful lives ranging from 5 to 35 years. The cost of maintenance and repairs is charged to income as incurred and significant renewals and betterments are capitalized.

Allowance for Doubtful Accounts: The WVSMA values its notes receivable at net realizable value by expensing amounts determined to be uncollectible in the period of determination.

Medical Scholarship Obligation: Until 1987, the WVSMA provided scholarships to students attending Schools of Medicine at West Virginia and Marshall Universities for the purpose of defraying expenses incurred by such students. A liability for the remaining scholarship obligation is a part of the general fund.

Fund Balance: The WVSMA has designated a special assessment fund to be used for professional liability education. The fund is to be used to inform physicians about current and potential problems with malpractice insurance and is accounted for in the unrestricted fund. During 1991, the Board approved the dissolution of this fund.

The Endowment Fund, a restricted fund, was established to pay for the guest speaker at the annual meeting and consists of equity securities stated at cost, which approximates market.

Recognition of Revenue: Members are billed in October for the subsequent year's dues, which are treated as earned in the period to which they relate. All dues received prior to January 1 are reported as dues collected in advance. In 1991, the WVSMA received special contributions from its members to promote the concerns of the membership with respect to legislative rules and regulations which affect the practice of medicine in the State of West Virginia. The WVSMA used the contributions to pay for lobbying and legislative update expenses totaling $100,085.

Reclassifications: Certain amounts reported in 1990 have been reclassified to conform with 1991 presentation. Such reclassifications had no impact on excess (deficiency) of revenues, over expenses.

NOTE B—LAND, BUILDING, AND EQUIPMENT

A summary of land, building, and equipment and the related allowance for depreciation as of December 31 is as follows:

	1991	1990
Land	$ 141,247	$ 141,247
Building and improvements	635,585	635,585
Furniture and equipment	212,383	209,686
	989,215	986,518
Less allowance for depreciation	(326,748)	(290,091)
	$ 662,467	$ 696,427

NOTE C—FUTURE MINIMUM RENTALS UNDER OPERATING LEASES

The WVSMA leases office and computer equipment under noncancellable operating leases with terms of one year or more. The following is a schedule by years of minimum future rentals on these leases as of December 31, 1991:

Year ending December 31:	
1992	$10,300
1993	3,600
1994	2,700
Total minimum future rentals	$16,600

Total minimum future rentals do not include contingent rentals which may be assessed under the office equipment lease on the basis of usage in excess of stipulated minimums. Contingent rental expense in 1991 and 1990 approximated $600 and $400, respectively.

Rental expense in 1991 and 1990 approximated $12,000 and $9,000, respectively.

NOTE D—DEBT

In January 1990, the WVSMA refinanced its note payable to bank. The amount refinanced was $540,000. Terms of the agreement provide for interest at 10% with monthly installments of $5,211 (including principal and interest). Terms of the agreement before refinancing provided for interest at 7.5% to 14% with monthly installments of $5,500 (including principal and interest). The loan is collateralized by a first deed of trust on the building which had a net book value of approximately $503,000 at December 31, 1991 and $522,000 at December 31, 1990.

Maturities of the note payable to bank in the next five years consist of:

1992	$ 11,602
1993	502,596
	$514,198

Interest paid approximated $52,000 and $68,000 in 1991 and 1990, respectively.

NOTE E—RELATED PARTY TRANSACTIONS

In 1986, the WVSMA approved a $50,000 line of credit to Preferred Medical Care Network of West Virginia, Inc. (PMCN), a preferred provider organization established to benefit WVSMA members. This line of credit was fully drawn down to assist PMCN with initial start-up costs. In April 1989, the WVSMA approved an additional $25,000 line of credit to PMCN. As of December 31, 1990, the WVSMA had advanced $15,000 under this additional line of credit resulting in a gross note receivable of $65,000. During 1990, PMCN ceased operations. In 1989, management reserved $50,000 in anticipation of this outcome and management determined that PMCN would not likely be able to repay the remaining amounts advanced to them. Accordingly, provision for the remaining $15,000 due was made in the 1990 financial statements. The note receivable and related allowance were written-off in 1991.

NOTE F—PROFESSIONAL LIABILITY SERVICES

The WVSMA has separate agreements with Continental Insurance Agency (CNA) and McDonough Caperton Insurance Group, L.P. (MCIG) to provide educational and marketing services to the WVSMA's members relating to professional liability insurance. Under the terms of the agreements, the WVSMA is to receive up to $100,000 a year from each company. The WVSMA recognized income of $100,000 from CNA and $40,000 from MCIG in 1991 and 1990.

NOTE G—INCOME TAXES

Revenues of the WVSMA are generally exempt from federal income tax under Section 501 (c) (6) of the Internal Revenue Code. However, certain income, primarily advertising revenues and income received under agreements with insurance providers for their educational and marketing services and use of the WVSMA's membership lists, is considered unrelated business income and is taxable to the extent it exceeds allocable expenses.

In 1988, the United States Tax Court, and in 1989, the 4th Circuit Court of Appeals, held that the WVSMA's losses from advertising activities do not constitute net operating losses available for deduction from other related business income. Subsequently, the WVSMA lost its appeal of the 4th Circuit's decision to the U.S. Supreme Court in early 1990. Federal and state taxes, and past-due interest for the years ended December 31, 1984 through 1989, paid in 1990 approximated $103,000 and $49,000, respectively. In 1991, the WVSMA paid approximately $5,800 in income taxes.

NOTE H—RETIREMENT PLAN

The WVSMA is a participant in a Prototype Corporate Defined Contribution Retirement Plan (the Plan). All employees of the WVSMA are covered by the Plan as long as they are at least 21-years-old and have completed six months of service. The WVSMA's contribution approximated $29,000 and $21,000 in 1991 and 1990, respectively, based on 10% of the total compensation of all eligible participants. Employees are vested in their participant account at the rate of 20% for each completed year of service up to 100% vesting after five years of service.

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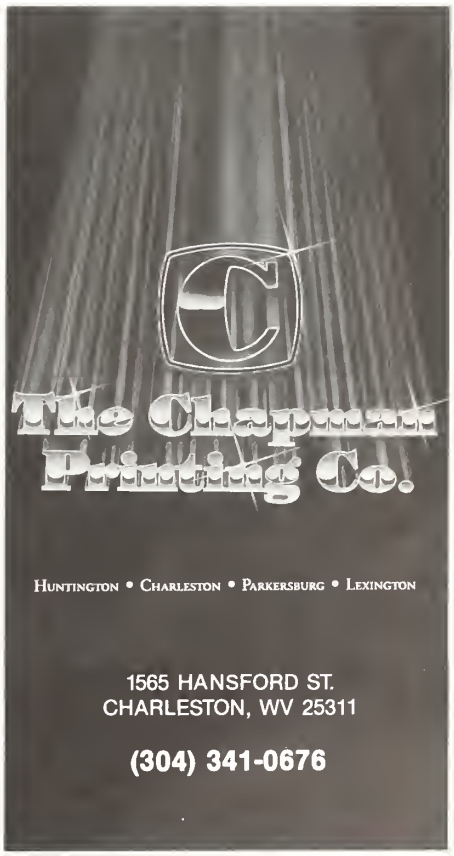

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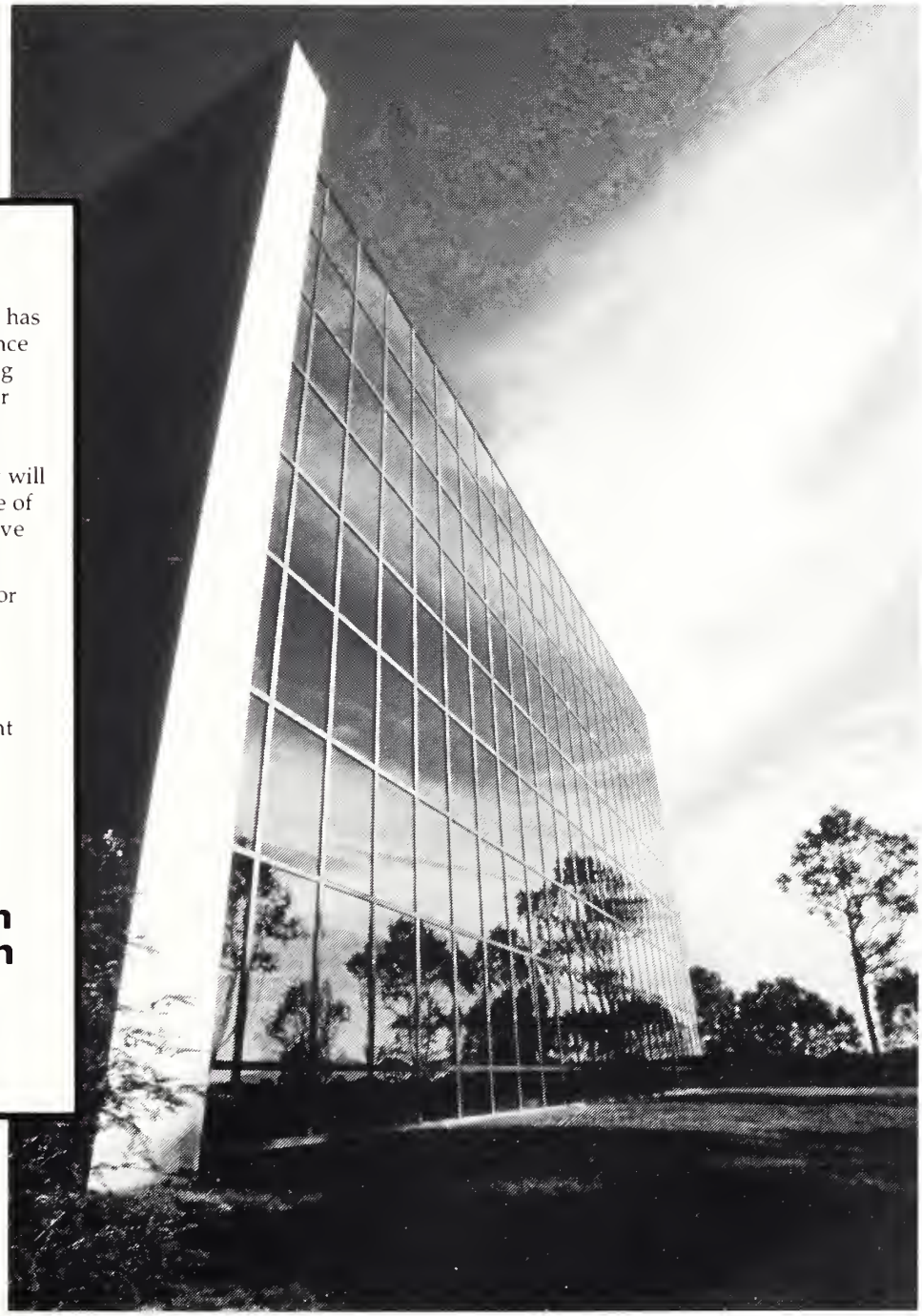

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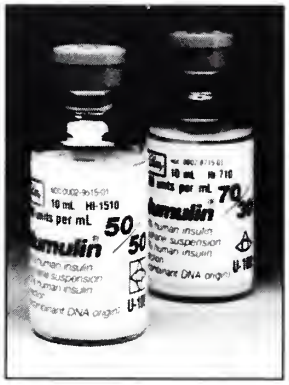

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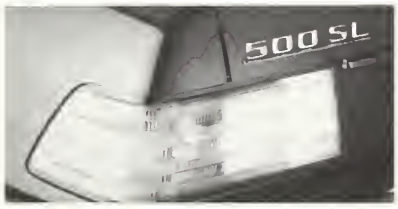

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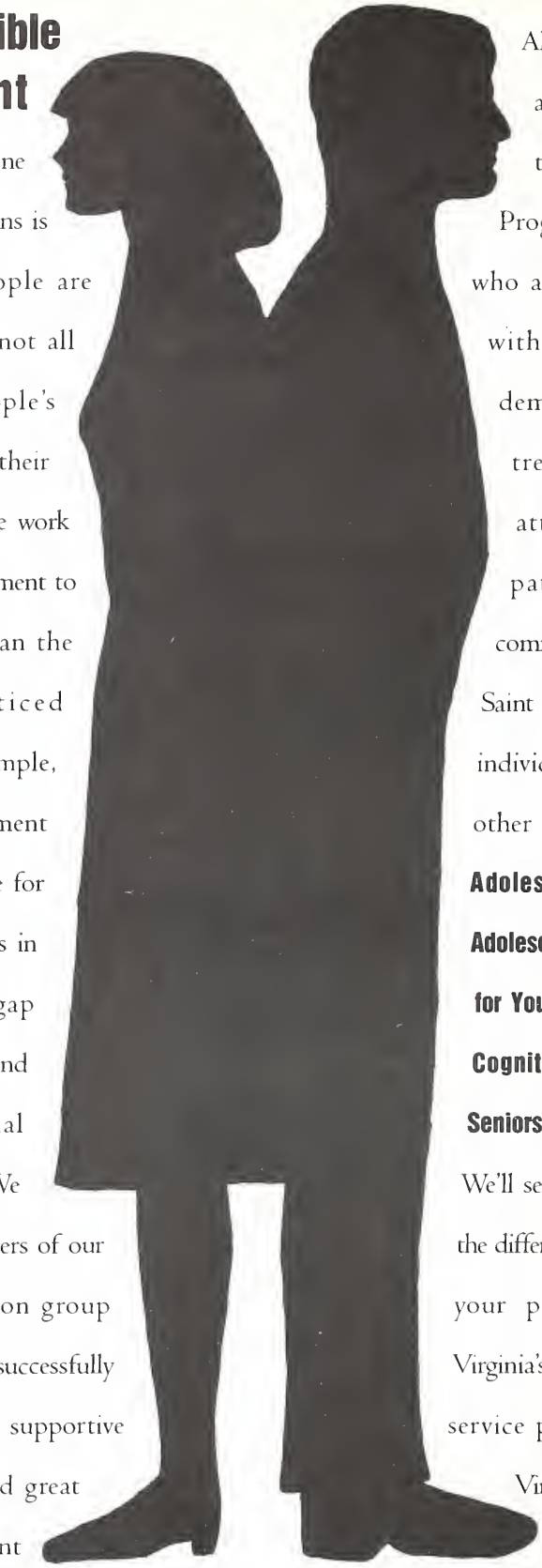

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West Virginia Medical
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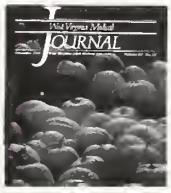

Front Cover

Pumpkins show off their rich and varied hues by the late afternoon sunlight in Ramage in Boone County. Photo courtesy of *Robbie Parsons,* South Charleston, WV.

A perspective on the status of health care in West Virginia

R. JOHN C. PEARSON, M.B., M.P.H.
Department of Community Medicine, West Virginia University, Morgantown

Introduction

It is important to put West Virginia health care problems into perspective. Kerr White described five levels of areas for measurement of health (of decreasing severity, but increasing importance as countries become developed): (1) deaths, (2) diseases, (3) disability, (4) discomfort, and (5) dissatisfaction. The purpose of this article is to show that West Virginia does surprisingly well as regards the first two, and that the areas for concern are the last three.

But first, a reminder is needed as to how West Virginia stands regarding socioeconomic factors: levels of income and education, employment, and age structure. This is necessary since health and longevity are affected by these factors to an important extent; in fact, studies suggest that at least 50 percent of differences in the frequency of disease and death are related to these factors.

A 1988 report by the West Virginia Department of Education showed that 27 percent of ninth grade students do not complete high school and that West Virginia is one of 10 states where undereducated adults exceed 35 percent of the population (1). A more recent study showed that only 68 percent of West Virginians had 12 or more years of education as compared to the national average of 77 percent. In 1988, West Virginia ranked 49th among the states in per capita personal income; and during the 1980s, approximately one in five persons had an income below the poverty level (1). West Virginia has in recent years had one of the highest unemployment rates. The 1990 Census showed 15 percent of the population to be 65 or older -- more than one percent higher than the national rate (2).

These socioeconomic factors, in studies around the world and over decades of study, have consistently been shown to be associated with increased mortality overall and, for heart disease and strokes in particular, increased infant mortality and increased morbidity both from infectious and chronic diseases. A recent study from the National Center for Health Statistics compared those with 12 or more years of education with those with less and showed the less educated to report more diabetes, hypertension, strokes, heart attacks, arthritis, low back problems, vision and hearing problems, paralysis of extremities, amputations, and gastrointestinal complaints -- even after adjusting for age differences in the two groups (3).

Another recent study shows that the most significant factor about the impact of income in developed countries is the distribution of incomes in the country, rather than the overall income level (4). Correlated with socioeconomic factors are the behavioral risk factors, and West Virginia is the leading state in the nation in terms of obesity, tobacco use, lack of exercise, and non-use of seat belts, but not for alcohol use. The high frequency of hypertension was also confirmed in these annual telephone surveys (5). Disability rates are also closely correlated with socioeconomic factors, and West Virginia is no exception.

Death

With these strikes against the population, mortality in West Virginia should be high, and the age-adjusted mortality rates do, indeed, show this to be so for almost all of the commonest causes of death, especially for heart disease and strokes. However, the medical care system is shown to be working well in two analyses.

First, the infant mortality is currently at or below the national average -- which it certainly should not be given the socioeconomic factors. This is due to two programs:

(1) The regionalization of high-risk mothers and sick newborns which in a recent study was shown to be operating with great effectiveness; and

(2) The follow up of high-risk newborns in their homes in the first year of life which saved one life per 1,000 babies in the program's first year of full operation in the late 1980s. Only the problem of low-birthweight babies remains to be solved.

Second, in a comparison of deaths believed to be "amenable to medical care" (a measurement used in multiple studies and largely consisting of deaths from chronic diseases in middle-aged and young persons) between West Virginia and the nation in the mid 1980s, West Virginia had a seven to eight percent higher mortality. This increase, though, was in only three conditions -- cancer of the cervix, strokes, and post-neonatal mortality (Table 1 and Figure 1) (6). The rate for West Virginia in 1988-90 combined data showed a 16 percent reduction from the 1985-87 data. The

TABLE 1
NUMBER OF AMENABLE DEATHS IN WEST VIRGINIA
1985-87 EXPECTED/OBSERVED (ON BASIS OF U.S. EXPERIENCE) AND 1988-90 OBSERVED

		1986-87		1988-90
		EXPECTED	OBSERVED	OBSERVED
Infectious Diseases	(0-64)	9	8	7
Cancer of Cervix	(15-64)	20	36	25
Hodgkins	(0-34)	4	4	1
Diabetes Mellitus	(0-49)	21	24	28
Thyroid Diseases	(0-64)	1	2	1
Nutritional Diseases	(0-64)	2	3	2
Epilepsy	(0-64)	9	9	7
Rheumatic Heart	(0-49)	5	7	4
Hypertension	(35-64)	54	49	54
Stroke	(35-64)	151	164	129
Pneumonia, etc.	(0-49)	37	32	32
Peptic Ulcer	(5-64)	9	7	6
Appendicitis	(0-64)	1	2	1
Hernia and Obstruction	(0-64)	6	7	7
Cholecystitis	(5-64)	3	1	1
Maternal Mortality	(15-44)	2	1	2
Infant Mortality	(0- 1)	102	109	85
Totals		436	465	392
Ischemic Heart Disease		718	1,012	825

Source: Boys RJ et al. Mortality from causes amenable and non-amenable to medical care: the experience of Eastern Europe. Br Med J 1991 Oct 12;303:879-83.

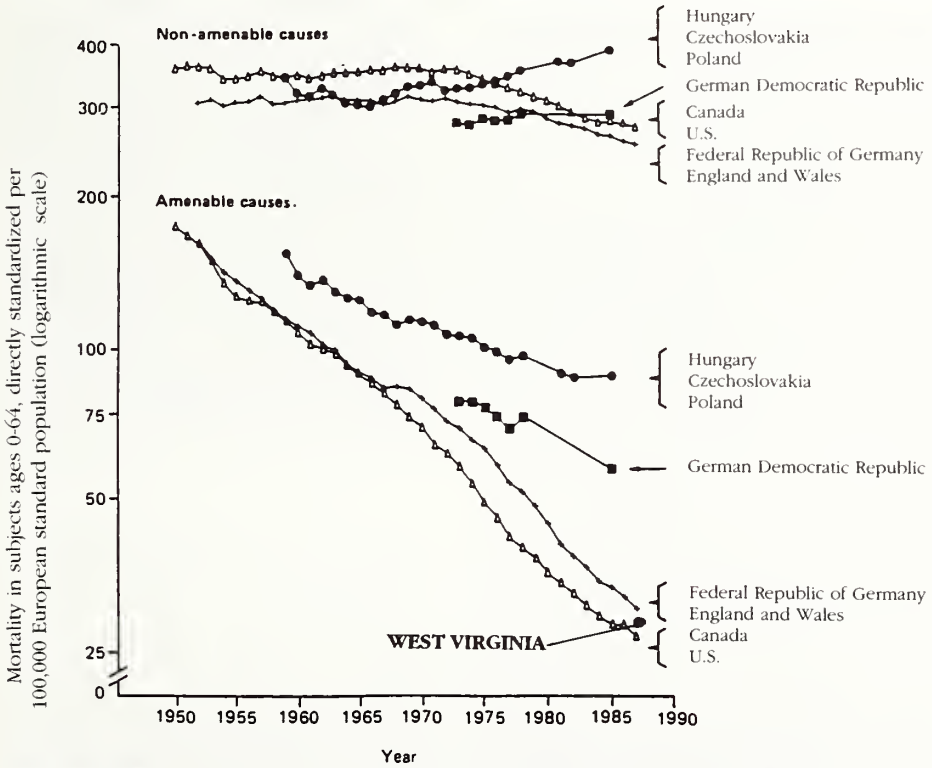

FIGURE 1. Trends in age standardized mortality from amenable and non-amenable causes among subjects ages 0-64.

reduction was dramatic in the three high rates with little change in the others.

The higher rates of cancer of the cervix and strokes are clearly related to West Virginia's social and economic status, and the third factor, post-neonatal mortality, is expected to be reduced by the high-risk newborn program referred to previously. Otherwise, despite adverse socioeconomic factors, the mortality experience was comparable.

Theses studies suggest that the medical care system deserves credit for its efforts, at least in terms of mortality.

Hospitalizations

The data concerning the overall frequency of hospitalizations for West Virginians for 1986, 1988 and 1989 shows a pattern comparable to that of the United States generally with a higher overall rate; but it also reveals lower frequency rates for hospitalization for cardiac and orthopedic surgery (Tables 2-5). It is very striking, however, that the frequency of hospitalizations is very homogeneous across the state for Medicare patients despite very different provisions of physicians within the county boundaries (Table 6). However, the hospitalizations for all ages do show an increase in counties with more physicians, but the gradient is small. Studies have shown that 90 percent of West Virginians are within half an hour of a hospital, a finding which is comparable to the national experience.

Discomfort and dissatisfaction

The state's health care system does not work so well in terms of providing primary care in rural areas, but there are a number of reasons for this that are not related to the health manpower. The population tends to be spread out and sometimes is comparatively inaccessible because of terrain. West Virginia's citizens tend not to have money or health insurance, and there is not a strong tradition of using health care services for preventive services. Also, funding for public health services is often, if not usually, slender. The splendid primary care clinics, such as in Union, Franklin, West Union and Scarbro, which provide both primary care and

TABLE 2
1986 MEDICARE HOSPITAL DISCHARGES PER 1,000*

	United States	West Virginia	Charleston	Huntington	Parkersburg	Wheeling
All Diagnoses	327	379+	365+	364+	384+	393+
Heart Disease	65	81+	73+	75+	70	88+
IHD	31	40+	37+	36+	33	46+
Ac MI	11	13+	12	13+	13	14+
Cancers	27	28	29	30	30	31
GI	7	7	6	6	8	8
Resp	4	5+	6+	6+	4	5
Stroke	12	13+	12	13	14	12
Pneumonia/Flu	16	22+	19+	19+	20+	20+
Gallbladder	6	8+	7	7	8	7
Hernia	5	6+	6	6	7	5
Fx Neck Femur	7	8	8	8	9	8

+ indicates a statistically significant high rate, compared to U.S. overall
x per 1,000 over the age of 65
Source: HCFA Special Report: Hospital Data by Geographic Area for Aged Medicare Beneficiaries, vols. I and II, 1986. HCFA publication 03300, June 1990.

TABLE 3
1986 MEDICARE HOSPITAL DISCHARGES FOR U.S. AND WEST VIRGINIA PER 1,000*

	United States		West Virginia	
	Metro	Other	Metro	Other
All Diagnoses	317-	354+	377+	380+
Heart Diagnoses	63	70	77+	83+
IHD	30-	34+	38	42
Ac MI	10-	12+	13+	13+
Cancers	27+	26-	30+	27
GI	7+	6-	7	6
Resp	5	5	5+	5+
Stroke	12-	13+	13	14+
Pneumonia/Flu	14-	20+	20+	23+
Gallbladder	6-	8+	7	9+
Hernia	5-	6+	6+	6+
Fx Neck Femur	7	7+	8	7

+ indicates a statistically significant high rate compared to U.S. overall.
- indicates a statistically significant low rate compared to U.S. overall.
x per 100 over the age of 65
Source: HCCRA 1988 Hospital Discharge File and NCHS Vital and Health Statistics, Series 13,1107, March 1991.

TABLE 4
1986 MEDICARE PROCEDURES FOR U.S. AND WEST VIRGINIA PER 1,000*

	U.S.		WV	
	Metro	Other	Metro	Other
PT Coronary Angioplasty	1.28	1.25+	1.21	0.97
CAB Graft	2.75	2.67	2.66	2.24-
Cardiac Cath	9.20	8.92-	8.21	7.53-
Pacemaker Placement	2.27	2.14-	2.00	1.91
Carotid Endarterectomy	1.81	1.88	2.26	1.79
Partial Colectomy	3.84+	3.49-	4.26	3.18
Cholecystectomy	4.61-	5.70+	5.89	6.51+
Hernia Repair	3.52-	3.79+	3.93	3.79
Prostatectomy	22.84	22.94	24.13	22.97
Hysterectomy	2.90-	3.24+	2.72	3.39
Hip Replacement	2.31	2.48+	1.85	1.72-
Fx Femur	4.44	4.42	5.01	4.69
Arthroplasty Hip	2.18-	2.40+	2.68	2.40
Knee Replacement	1.90-	2.38	1.44-	1.48-

+ indicates a statistically significant high rate compared to U.S. overall.
- indicates a statistically significant low rate compared to U.S. overall.
x per 1,000 over the age of 65
Source: HCCRA 1988 Hospital Discharge File and NCHS Vital and Health Statistics, Series 13,1107, March 1991.

TABLE 5
1988 PRINCIPAL PROCEDURES IN WEST VIRGINIA AND U.S. IN HOSPITAL RATES PER 10,000

	WV	U.S.
Tonsillectomy and/or Adenoidectomy	17.7	9.2
Mastoidectomy	1.3	0.9
Rhinoplasty	3.2	2.9
Appendectomy	9.4	11.1
Cholecystectomy	25.3	20.2
Hernia	13.4	11.6
Partial Colectomy	7.4	7.3
TUR Prostate	30.2	26.9
Abdominal Hysterectomy	40.7	34.7
"Disc"	9.6	10.2
Knee Replacement	3.2	4.3
Total Hip Replacement	3.5	2.5
Amputations BK & AK	2.2	2.3
Mastectomy	5.4	5.0
Coronary Angioplasty	4.8	8.6
Coronary Artery Bypass	6.8	9.9
Cardiac Cath	31.7	35.1
Carotid Endarterectomy	3.2	2.8

Sources: HCCRA 1988 Hospital Discharge File and NCHS Vital and Health Statistics, Series 13, 1107, March 1991.

community health care, stand out as examples of what might be possible everywhere.

This problem is not specific to West Virginia or to 1992. Canada (in its north), Australia, Mexico, Norway, the former USSR, and all the developing countries, have to face this problem. Britain and Canada have had the most success in solving this problem and

TABLE 6

1989 MD/DO RATIO PER RESIDENT POPULATION, 1988 MEDICARE DISCHARGES RATE PER 1,000 AND ESTIMATED 1988 TOTAL HOSPITAL DISCHARGE RATE (All Ages) PER 1,000*

	MDs/DOs Ratio	Medicare Discharge Rate	All Discharges
Hardy County	5,350	343	179
Gilmer County	3,900	374	136
Ritchie County	3,633	376	160
Doddridge County	3,550	253	107
Lincoln County	3,300	407	130
(Median)		374	136
Clay County	2,800	364	145
Wirt County	2,550	427	200
Putnam County	2,322	337	112
Hampshire County	2,050	315	138
Wyoming County	2,037	431	145
Tucker County	2,025	294	129
Pendleton County	2,000	266	107
(Median)		337	138
Taylor County	1,962	332	122
Boone County	1,880	464	155
Marion County	1,681	328	148
Jackson County	1,593	336	143
Morgan County	1,512	272	107
(Median)		332	143
Preston County	1,433	397	156
Braxton County	1,430	335	164
Jefferson County	1,420	296	158
Webster County	1,412	369	141
Monroe County	1,400	367	203
Roane County	1,390	401	168
Pocahontas County	1,314	520	163
Mineral County	1,311	432	155
Tyler County	1,300	394	149
Barbour County	1,283	390	141
McDowell County	1,263	459	163
Wetzel County	1,211	385	182
Wayne County	1,190	409	77
Summers County	1,176	371	152
Mingo County	1,020	397	165
Brooke County	1,010	361	157
Raleigh County	1,002	393	153
(Median)		393	157
Nicholas County	975	377	130
Fayette County	961	439	160
Upshur County	888	364	137
Calhoun County	830	390	162
Lewis County	800	399	166
Hancock County	775	618	241
Pleasants County	770	371	142
Randolph County	673	446	172
Wood County	640	433	172
Mason County	636	444	161
Grant County	635	385	172
Berkeley County	634	306	149
Harrison County	613	362	158
Logan County	587	573	185
Marshall County	511	430	155
(Median)		399	161
Mercer County	451	416	176
Kanawha County	408	365	151
Greenbrier County	369	402	77
Cabell County	313	307	142
Ohio County	249	402	176
Monongalia County	195	369	116
(Median)		386	146
West Virginia	567	388	
United States	467	334	

*The rate for all discharges was adjusted to allow for out of state.

have succeeded because they made it possible for rural physicians to make more money than urban physicians. They, thereby, made the problems of isolation, transportation, and terrain tolerable.

West Virginia has made a number of attempts to reduce isolation through continuing education, television and other communications, and visiting clinician programs. The Kellogg Foundation, Governor Caperton's plan, and HETC programs will increase exposure to rural care during health profession education. However, we do not yet have a system to encourage generalists for rural practice and this is our challenge.

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AIDS in West Virginia: Is a patient's right to confidentiality outweighed by a physician's need to know?

CHRISTINE S. VAGLIENTI, J.D.,
Morgantown

Since the early 1980s, the AIDS virus has created many difficult and emotional issues for patients and health care providers alike. With the media attention given such tragic cases such as those of Kimberly Bergalis, who allegedly contracted the AIDS virus from her dentist (1), and Dr. Edwin Rozar, a former heart surgeon who contracted the AIDS virus from a patient (2), the AIDS patient and the health care provider have been cast in the unusual roles of adversaries, rather than partners in health care.

An issue frequently debated among health care providers is "Who has a right to know a patient's HIV status?" Put another way, "Does an HIV patient's right to confidentiality outweigh a health care provider's need to know?"

Physicians often need to know a patient's HIV status for purposes of providing appropriate medical treatment and in order to take appropriate precautions for the health and safety of the patient, as well as the physician and other health care providers. Many physicians find themselves wanting to share information about a patient's HIV status with other health care providers so that appropriate precautions can be taken, but worry about liability arising from a breach of the patient's confidentiality.

The West Virginia AIDS-Related Medical Testing and Records Confidentiality Act (hereinafter "the Act") (3), provides a great deal of guidance to physicians facing such a dilemma. Enacted September 1, 1988, the Act permits a physician to disclose the results of a patient's HIV test to the patient and to enter HIV-related information onto a patient's medical chart (4). The physician may also disclose a patient's HIV status to a funeral director, or the funeral director's employees; an agent or employee of a health care facility or health care provider if the health care facility or provider is *authorized* to obtain the HIV test results, the agent or employee provides patient care or handles or processes specimens of body fluid or tissues and the agent or employee has a *need to know* such information (5). Unfortunately, the Act does not define *"authorized"* or *"need to know"* as these terms relate to health care facilities and their employees.

A physician may also disclose a patient's HIV status to licensed medical personnel or appropriate health care personnel providing care to an HIV patient when knowledge of the test results is necessary or useful to provide appropriate care or treatment in an appropriate manner (6). The Act does not define *"in an appropriate manner,"* but one could argue that *"in an appropriate manner"* means *"with appropriate precautions."*

A patient's HIV status may also be disclosed to a health care facility or health care provider which procures, processes, distributes or uses a human body part from a deceased person with respect to medical information regarding that person; semen provided before September 1, 1988, for the purposes of artificial insemination; blood or blood products for transfusion or injections; or human body parts for transplant with respect to medical information regarding the donor or recipient (7).

A physician or health care facility may also release HIV-related information to a person who secures a specific release of the information, signed by the patient. An authorization for the "release of all medical records" is not sufficient for this purpose under the Act (8,9). If the patient cannot give a specific authorization because of incapacity or incompetency, substituted consent must be obtained, in the following order of preference:

(1) A person holding durable power of attorney for health care decisions for the patient;
(2) The patient's duly appointed legal guardian;
(3) The patient's spouse;
(4) Parent;
(5) Adult child;
(6) Sibling;
(7) Uncle or aunt; or
(8) Grandparent (10).

Under existing West Virginia law, a patient under the age of 18 does not have the legal capacity to give consent for a medical test or to authorize the release of his or her medical records (11,12).

A patient's HIV status may also be released pursuant to a court order (13). A *subpoena duces tecum*, although an official court document, does not carry the weight of a court order, and is not sufficient under the Act to relieve the physician's obligation to safeguard an HIV patient's confidentiality (14). HIV-related

information released pursuant to a specific release or a court order must contain the following, or substantially similar, warning:

> This information has been disclosed to you from records whose confidentiality is protected by state law. State law prohibits you from making any further disclosures of the information without the specific written consent of the person to whom it pertains, or as otherwise permitted by law. A general authorization for the release of medical or other information is NOT sufficient for this purpose (15).

According to the Act, a physician may also release information about a patient's HIV status to the United States Centers for Disease Control in accordance with its reporting requirements (16). Release to health care facility staff committees or accreditation or oversight review organizations which are conducting program monitoring or evaluation is also authorized, so long as the patient's identity remains anonymous (17).

Despite the strict provisions designed to maintain an HIV patient's right to confidentiality, the Act permits, but does not require, a physician to use a patient's HIV test results to inform individuals named or identified as sex partners or persons who have shared needles with the patient, that they may be at risk for contracting the AIDS virus. The physician, however, must keep the patient's identity confidential when contacting these third parties (18). A cause of action will not arise against a physician for the consequences of the physician's decision to contact or not contact such third parties. However, if a physician decides not to contact the third parties, he or she must notify the West Virginia Bureau of Public Health of that decision (19).

The Act addresses many issues in addition to releasing information about a patient's HIV status. For example, the Act allows a physician, dentist or the director of the West Virginia Bureau of Public Health to request that a patient be HIV tested when there is cause to believe that the test may be positive, may provide information important in the care of the patient, or when a person voluntarily consents to the test (20). If a patient cannot voluntarily consent to an HIV test because of incapacity or incompetency, substituted consent must be obtained in the same manner as for a specific authorization for release of medical information (21).

In the case of a documented bona fide medical emergency, when a patient is unable to give consent, and substituted consent is not readily available, an HIV test may be done without consent if the test results are necessary for medical diagnostic purposes to provide appropriate medical emergency care. Necessary treatment cannot be withheld while HIV test results are pending (22).

Under the Act, a person will be required to submit to an HIV test if he or she is convicted of prostitution, sexual abuse, sexual assault, molestation or incest (23). The director of the West Virginia Bureau of Public Health may also require an HIV test for the protection of a person possibly exposed to HIV-infected blood or other body fluids as a result of rendering or receiving emergency medical assistance or as a result of activities as a funeral director (24). A person who is identified through medical or epidemiological information as an IV drug abuser, as having a sexually transmitted disease, or as having the HIV infection and posing a possible danger to the public, may also be required by the director of the West Virginia Bureau of Public Health to submit to an HIV test (25).

Regardless of whether an HIV test is administered with or without a patient's consent, a person who submits to an HIV test must be provided with printed information which includes an explanation of the test; its purposes, potential uses, and limitations; the meanings of its results, and any special relevance to pregnancy or prenatal care; an explanation of the procedures to be followed; an explanation of current knowledge of asymptomatic HIV infection, ARC and AIDS; the relationship between the test results and those diseases; and information about behaviors known to pose risks for transmission of the HIV infection. Patients voluntarily submitting to an HIV test must also be told that they may obtain the test anonymously, and that they may withdraw their consent at any time (26).

If a patient is unable to read, this HIV information may be provided via video or by reading the printed material to the patient (27). Although the Act is silent on the subject, the duty is probably on the physician or other health care provider requesting or administering the HIV test to determine the patient's ability to read.

Once an HIV test result is obtained, whether positive, negative or otherwise, a patient must be provided with or referred to counseling, in order to cope with the emotional consequences of learning the test results (28).

Although the Act has no stated legislative purposes, its effect is to balance the rights and needs of both the HIV patient and the physicians and other health care providers responsible for that patient's care. The Act strictly prohibits health care professionals or facilities from denying a patient access to quality health care based on the patient's HIV status (29) and provides stiff penalties for the release of information about a patient's HIV status outside the guidelines established by the Act (30). Yet the Act recognizes the need of physicians to know a patient's HIV status and to share that information, delicately and professionally, with other health care providers.

The Act is a comprehensive guide for physicians and other health care providers caring for HIV patients. It does not, however, anticipate all situations which may arise for a physician caring for an HIV positive patient. It is important, therefore, that physicians become familiar with the Act's provisions and seek legal advice should questions regarding its applicability arise.

1. Newsweek 1991, July 1: 49.
2. Pittsburgh Press 1991, July 15: A1.
3. West Virginia Code, Chap. 16, Art. 3C (1991 Repl. Vol.).
4. West Virginia Code, 16-3C-3(a)(1) and 16-3C-3(a)(4).
5. West Virginia Code, 16-3C-3(a)(3).
6. West Virginia Code, 16-3C-3(a)(4).
7. West Virginia Code, 16-3C-3(a)(6).
8. West Virginia Code, 16-3C-3(a)(2).
9. West Virginia Code, 16-3C-3(c).
10. West Virginia Code, 16-3C-4.
11. West Virginia Code, Chap. 2, Art. 3.
12. Interestingly, a physician may examine, diagnose, or treat a minor, with only the minor's

consent, for venereal disease. (West Virginia Code 16-4-10). Also, a physician treating a minor for birth control, prenatal care, drug rehabilitation or venereal disease may not release the patient's medical records to the patient's parent or guardian without the patient's prior written consent. (West Virginia Code, 16-29-1).

13. West Virginia Code, 16-3C-3(a)(8).
14. Allen v. Smith, 369 S.E.2d 924 (W. Va. 1988).
15. West Virginia Code, 16-3C-3(c).
16. West Virginia Code, 16-3C-3(a)(5).
17. West Virginia Code, 16-3C-3(a)(7).
18. West Virginia Code, 16-3C-3(d).
19. West Virginia Code, 16-3C-3(e).
20. West Virginia Code, 16-3C-2(a).
21. West Virginia Code, 16-3C-4(a).
22. West Virginia Code, 16-3C-2(e)(2).
23. West Virginia Code, 16-3C-2(f)(2).
24. West Virginia Code, 16-3C-2(f)(3).
25. West Virginia Code, 16-3C-2(f)(4).
26. West Virginia Code, 16-3C-2(b).
27. Id.
28. West Virginia Code, 16-3C-2(d).
29. West Virginia Code, 16-3C-6(a).
30. A physician who recklessly violates the Act may be liable to the patient for liquidated damages of $1,000, or the patient's actual damages, whichever is greater, plus attorneys' fees. In the case of a physician who intentionally violates the Act, the liquidated damages are $10,000. (West Virginia Code, 16-3C-5).

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Physician malpractice trends in the 1990s

STEPHEN L. BROWN,
Senior Vice President of Professional Liability Services, McDonough Caperton Insurance Group, Charleston

During 1993, it is expected that West Virginia physicians will pay more for medical malpractice insurance than they have in the past. This is due to a continuation of increases in severity and frequency of claims.

Frequency of claims

Frequency of claims is generally defined as the average number of claims per 1,000 physicians. During the period from September 1, 1990 through August 30, 1991, statistics reported to the National Practitioner Data Bank by insurance companies, indicate that West Virginia physicians rank third highest in frequency (38 claims paid per 1,000 physicians), compared to the national average of 21 paid claims per 1,000 physicians. In addition, during this same period, West Virginia physicians ranked 14th highest in total number of claims (128) reported.

Severity of claims

Severity of claims is defined as the dollar amount paid to settle claims. One major insurance carrier in West Virginia reports an average expected severity of approximately $165,000 per claim during 1991. This amount is a continuation of a severity trend that began in 1988.

Implications

Aside from insurance premium increases, there are other important potential implications which may result from these trends. The two most severe implications are:

1) Potential adverse financial implications for the insurance companies now providing the coverage in the state, which ultimately may affect their ability to pay claims as promised, and
2) Possible insurer decisions to implement more stringent underwriting eligibility requirements, thereby reducing the availability of medical malpractice insurance for those individuals who are deemed to be less than desirable physicians.

What actions can West Virginia physicians take to position themselves to avoid these negative implications?

Consider insurer stability

With the potential for catastrophic malpractice claims, insurance companies must be capable of surviving the financial impact.

While the price of a malpractice policy is a serious consideration, an unusually low price may be an indication of an insurer's inability to pay claims. Physicians should carefully evaluate an insurance company's financial stability prior to purchasing their protection.

What factors should physicians consider in evaluating an insurance company's financial stability?

A.M. Best Company is the leading insurance industry analyst which evaluates approximately 2,400 of the nation's insurance companies annually. Their ratings range from A++ to D to "not assigned."

Of the companies who were rated, over two thirds received an A rating (A++ to A-), while one third received a B+ or lower.

Best's rating is worthy of serious consideration, but should be tempered by individual evaluation of insurance carriers available. Items to be specifically reviewed are quality of investments, statutory surplus, premium-to-surplus ratios, and reserves. Information regarding the meaning and method of these evaluations can be obtained from A.M. Best Company directly, or through a qualified insurance agent.

Utilization of an insurance agent who specializes in professional liability insurance will assist the physician in determining which insurance company can best provide the needed protection.

Finding a stable and secure insurer helps to avoid the problems that could result from the financial impairment of the physician's carrier. A physician needs to know that the carrier's obligations will always be met as promised.

Risk management techniques

Insurance companies use similar rationale, called underwriting eligibility guidelines, to evaluate a physician's insurability. Asking certain questions objectively, physicians can determine areas of practice that need to be addressed to improve their insurability, and defendability, should a claim arise.

These questions include:

1) "How can I reduce the likelihood of a claim being made against me?", and
2) "In the event a claim is made against me, how can I best be prepared to defend myself?"

To answer these questions, it is suggested physicians consider a risk management survey of their practices. Just like the value of a review of financial records for tax purposes, it is important to use a risk manager to identify exposures to medical malpractice.

For example, an area of concern to insurance companies is clinical documentation. A physician is required to use medical judgement to determine a diagnosis and subsequent treatment plan. It is therefore important that medical judgment be supported by documentation regarding the factors leading the physician to the diagnosis and/or treatment rendered. If the judgment is not supported by the clinical documentation, and a claim results, the defendability of the physician may be in question. The old adage, "if it wasn't charted, it wasn't done", holds fast in court. A review of clinical documentation practices is considered paramount in any risk management evaluation.

Additional areas of a physician's practice worthy of risk management evaluation include:

a) Informed consent procedures,
b) Maintenance of continuing medical education,
c) Patient/physician relationships,
d) Hospital/medical staff relationships, and
e) Claims activity.

While none of there areas are directly patient care issues, they all indicate how a physician conducts his/her practice and provides patient care.

The utilization of a risk management evaluation will help the physician recognize deficiencies, and also serve as a checklist to maintain prudent practices. In addition, if insurability and defendability standards are maintained, a physician has the greater likelihood that coverage will be available, at an affordable price.

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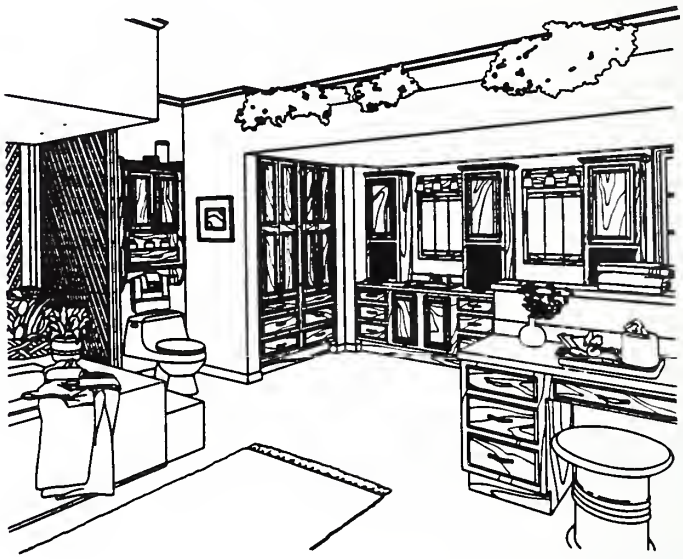

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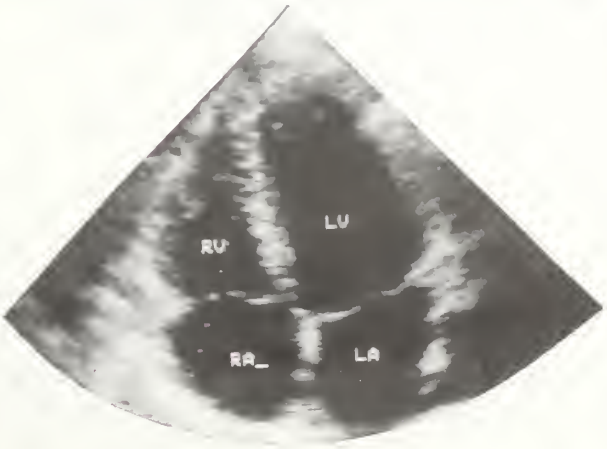

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Radiofrequency catheter ablation of cardiac arrhythmias: Initial WVU experience

STANLEY B. SCHMIDT, M.D.
Section of Adult Cardiology, West Virginia University School of Medicine, Morgantown

LARRY A. RHODES, M.D.
Section of Pediatric Cardiology, West Virginia University School of Medicine, Morgantown

Abstract

Radiofrequency catheter ablation is a method of selectively destroying cardiac tissue to treat various arrhythmias. In a relatively short time, it has evolved from an investigational tool to a widely applied clinical technique (1). This article reviews the current status of radiofrequency catheter ablation and reports on the results of its initial clinical use in 14 patients at West Virginia University Hospital.

Technical methods

In 1982, Scheinman (2) and Gallagher (3) reported on the use of high-energy direct current shocks to destroy the atrio-ventricular (AV) node in patients with atrial fibrillation. Later, this method was applied to ablation of accessory pathways in patients with Wolff-Parkinson-White syndrome (4). These high-energy direct current shocks were delivered by connecting conventional cardiac defibrillators to transvenous pacing wires placed near the structure to be ablated. This technique proved to be moderately effective, particularly for ablation of the AV node, but the delivered energy was difficult to regulate, and complications were moderately frequent. Low-energy direct current may evolve into a more useful energy source.

Radiofrequency electrical current has been used for some years by neurosurgeons to destroy neural tissue, as in the treatment of trigeminal neuralgia (5). In 1987, Borggrefe reported on the use of radiofrequency electrical current to ablate accessory pathways (6). Radiofrequency current proved easier to regulate than high-energy direct current, and produced less unwanted damage to cardiac tissues and the electrode catheters. As a result, it has become the preferred energy source for most arrhythmia ablation procedures.

A typical arrangement for performing radiofrequency ablation as employed in our laboratory is outlined in Figure 1. Patients are monitored and sedated with fentanyl and midazolam. Unlike direct current ablations, the radiofrequency ablations are relatively painless, and we have not required general anesthesia in our adult patients. Electrode catheters are inserted transvenously and sometimes transarterially and positioned under fluoroscopic guidance in the cardiac chambers (Figure 2). These are placed to localize the areas responsible for the patient's arrhythmia by techniques of cardiac electrical mapping. A variety of markers may be used to identify promising sites for attempting ablation. We have observed, as have others, that direct recording of potentials from accessory pathways (Figure 3) is one of the more useful findings in identifying successful sites for accessory pathway ablation (7).

Once the area responsible for the arrhythmia has been identified, radiofrequency current is routed from an energy source to an endocardial electrode positioned as near as possible to the tissue to be ablated. During the ablation, current flows between the electrode tip and a large indifferent surface electrode, which is usually positioned on the left posterior chest. The high density of electrical current

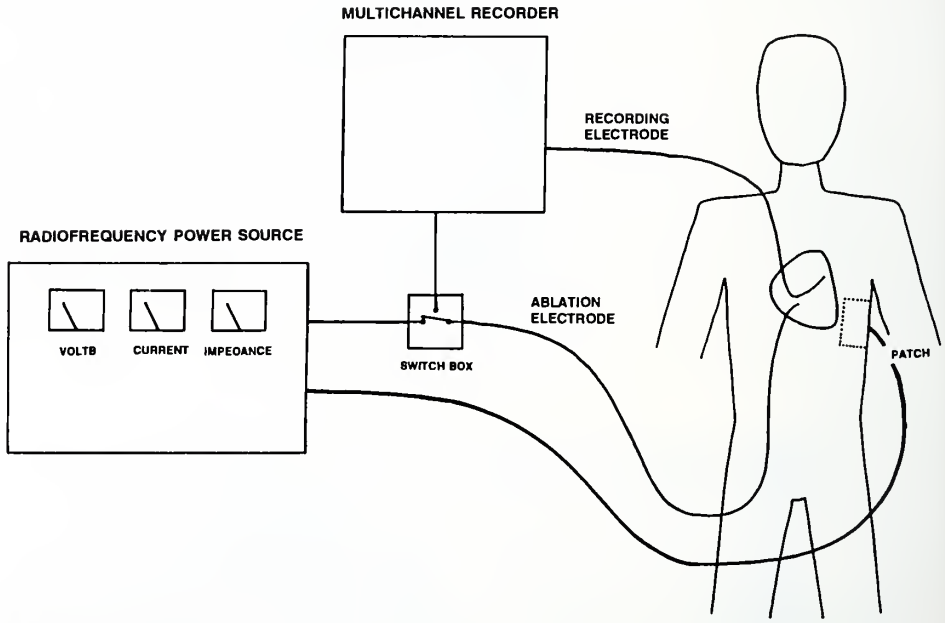

Figure 1. Radiofrequency catheter ablation.
See text for description of technique. The indifferent patch electrode is applied to the skin of the posterior chest. In actual practice, four or five recording multi-electrode recording catheters are used.

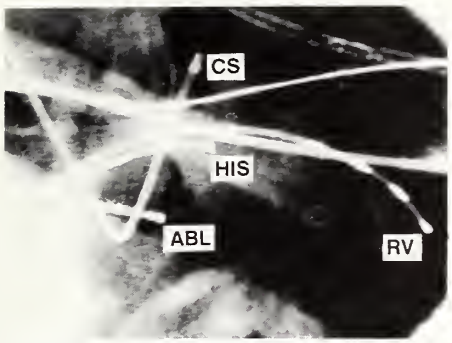

Figure 2. Cineangiographic image of electrode catheters in the heart.
ABL = ablation electrode, positioned near a posteroseptal accessory pathway. CS = coronary sinus electrode. HIS = His bundle electrode. RV = right ventricular apex electrode.

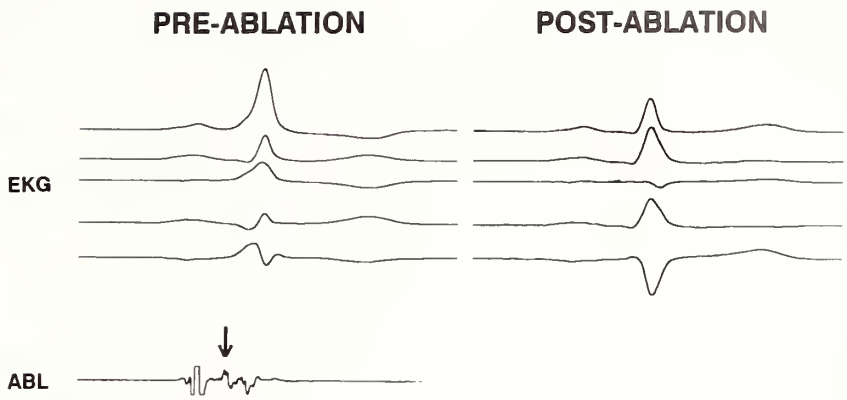

Figure 3. Accessory pathway ablation.
The upper five tracings (EKG) are recordings of surface electrocardiographic leads and the bottom tracing (ABL) is a recording from the ablation electrode positioned near an accessory pathway. Pre- and post-ablation recordings of sinus beats are shown on the left and right, respectively. The pre-ablation sinus beat shows a Wolff-Parkinson-White pattern on the surface EKG (short PR interval with delta wave), and the ablation electrode records a discrete potential (arrow) from the accessory pathway, between two other deflections, which represent local atrial and ventricular activation. Following pathway ablation, the surface EKG becomes normal, coincident with loss of the accessory pathway potential.

adjacent to the endocardial electrode heats a small area of cardiac tissue, which produces tissue necrosis. Tissue must be brought to about 50 C to be destroyed. If the temperature exceeds 100 C, a dried coagulum may develop on the catheter tip, which raises impedance to current flow, and effectively inhibits further delivery of thermal energy. If this occurs, the catheter must be removed and cleaned before further ablation is possible. Available power sources can automatically detect a rise in electrical impedance and abort energy delivery, if detected. We have found that limiting power delivery to 16 to 20 watts (40 to 60 volts x 400 mA) essentially eliminates coagulum formation, while often producing successful lesions. When possible the ablation current is applied with the patient in sinus rhythm. Current delivery during a tachyarrhythmia may cause dislodgement of the catheter if the arrhythmia terminates during current application, resulting in incomplete destruction of the arrhythmic focus. After apparently successful ablation, we routinely retest patients during infusion of isoproterenol prior to leaving the laboratory, to look for any residual arrhythmic focus. Patients are anticoagulated during the procedure with heparin, and most are prescribed daily aspirin for a month following the procedure.

An example of a typical lesion created by radiofrequency current *in vitro* is shown in Figure 4. The lesions created by radiofrequency current generally have well-demarcated borders. Irregular lesion borders, as sometimes found with direct current ablations, would have a higher potential for creating a substrate for future reentrant arrhythmias (8).

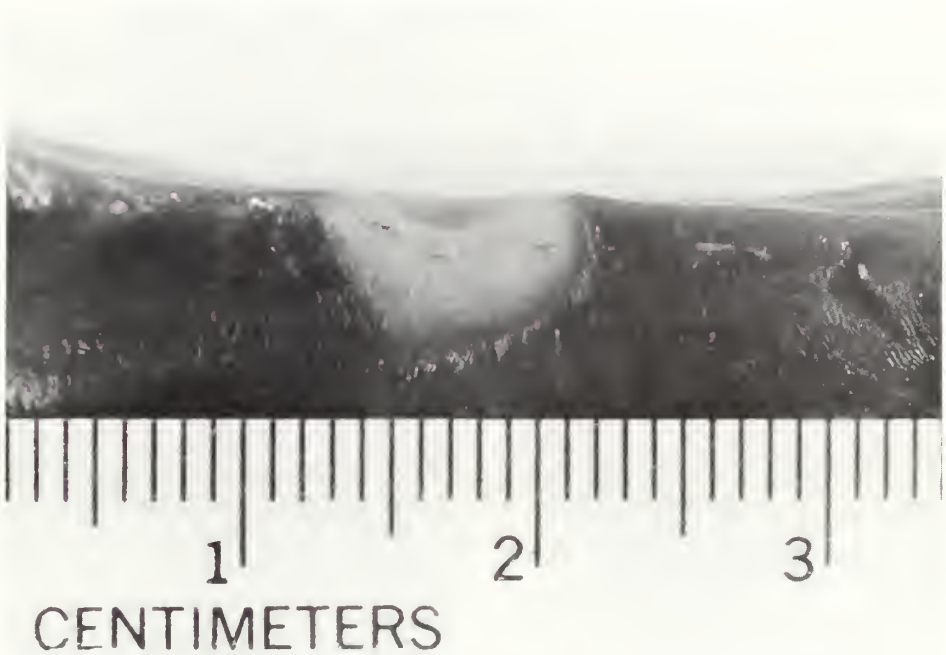

Figure 4. Radiofrequency current lesion produced *in vitro*.
The lesion was produced in a sheep heart by application of 16 watts of power (40 volts, 0.4 amperes) for 30 seconds. The lesion is approximately four mm. deep, and has a well-demarcated border.

Clinical results

Catheter ablations have been performed in the treatment of virtually every type of supraventricular tachycardia, and in several types of ventricular tachycardia. The greatest use has been in the treatment of arrhythmias caused by accessory AV pathways. These pathways arise during embryonic development when there is incomplete separation between atrial and ventricular myocardium around the AV groove. These pathways may conduct in a unidirectional or bidirectional fashion. Those which are capable of antegrade conduction from

atrium to ventricle typically distort the appearance of the QRS complex on the surface electrocardiogram, leading to the familiar Wolff-Parkinson-White pattern (9). Due to the fact that such pathways are evident on the resting electrocardiogram, they are said to be "manifest" accessory pathways. In other cases, the accessory pathways only conduct retrogradely, from ventricle to atrium. These do not distort the resting electrocardiogram, and are said to be "concealed." Both manifest and concealed accessory pathways may form part of the reentrant circuit in patients with paroxysmal tachycardia. Those whose pathways can conduct from atrium to ventricle may develop extremely rapid ventricular rates during atrial fibrillation, which is potentially life-threatening. Interruption of the accessory pathway is curative.

The largest series of accessory pathway ablations have been reported by Jackman (10) and Calkins (11). Jackman succeeded in ablating 174 (98 percent) of 177 accessory pathways during one session of ablation. The mean procedure duration was 8.3 hours. During a mean followup of eight months, arrhythmias or preexcitation recurred in 15 patients (9 percent). Calkins ablated 47 (84 percent) of 56 accessory pathways at the initial procedure, and following repeat ablations in some patients, reported a 92 percent cure rate at a minimum followup of three months. In the two series, the combined prevalence of concealed accessory pathways was approximately 23 percent.

To date, we have attempted ablation of 10 accessory pathways in 10 patients. Of these, five have been manifest and five concealed. The pathway locations have been left free wall in four and posteroseptal in six. One of our patients classified as having a posteroseptal pathway had the permanent form of junctional reciprocating tachycardia (PJRT) (12), and suffered from recurrent symptomatic arrhythmias following two earlier unsuccessful attempts at ablation at another institution. The accessory pathways were successfully ablated during the initial procedure in seven (70 percent) of our 10 patients. Ablation was judged to be partially successful in one additional patient whose arrhythmia was rendered non-inducible, but who continued to have some evidence for accessory pathway conduction.

Difficulties with catheter positioning led us to abandon attempts at ablation in the remaining two patients with accessory pathways. One of these was a 74-year-old man who was scheduled for coronary bypass surgery. Preoperative catheter ablation was attempted in the hope of shortening the duration of his surgery, but proved difficult due to an extremely tortuous aorta. We subsequently performed successful operative ablation of his accessory pathway in conjunction with the coronary bypass procedure. The other unsuccessful pathway ablation occurred in a 5-year-old girl with a concealed posteroseptal accessory pathway. The standard-sized ablation catheter available at the time of her procedure proved too large to position optimally within her relatively small right atrium.

None of the seven accessory pathway patients with initially successful results has developed recurrent arrhythmias during a mean followup of 3.4 ± 2.4 months. The patient whose ablation was judged partially successful developed recurrent palpitations six weeks following her initial attempt at ablation, and is scheduled for another attempt.

In approximately half of cases of "paroxysmal supraventricular tachycardia," the arrhythmia is due to AV nodal reentry. Most with this arrhythmia have evidence for fast and slow, or "dual" AV nodal pathways (13). During episodes of tachycardia, electrical impulses travel down one pathway and up the other in a circus movement. Interruption of either pathway obliterates one limb of the reentrant circuit, preventing further episodes of tachycardia, while preserving one pathway for AV conduction of sinus impulses. Abolition of both pathways would prevent further tachycardia, but would produce complete heart block and lead to a permanent pacemaker.

Calkins reported success in arrhythmia ablation in 37 (84 percent) of 44 cases of typical AV nodal reentry during the initial session of ablation (11). Arrhythmia recurrence has been infrequent. His technique specifically targets the fast pathway of the AV node. Kay (14) and Jackman (15) have reported successful results in selectively ablating the slow AV nodal pathway in patients with AV nodal reentry, and we have attempted the latter technique of AV nodal "modification" in two patients with the typical, or common form of AV nodal reentrant tachycardia. Results were judged to be initially successful in both, but one subsequently developed a recurrence of palpitations two months following her initial attempt at AV nodal modification. A second ablation attempt is scheduled for this patient.

Finally, we have attempted to produce complete heart block by AV node ablation in two patients; one with atrial flutter and one with atrial fibrillation. Both had failed repeated efforts to restore and maintain sinus rhythm, and suffered from rapid ventricular rates in spite of maximally tolerated drug therapy. Complete heart block was easily induced in the patient with atrial fibrillation, and he has experienced a significant improvement in his symptoms with ablation and permanent ventricular pacing.

The initial ablation session was not successful in producing AV block in the patient with atrial flutter. Interestingly, she has maintained sinus rhythm since a second ablation session, without heart block or recurrence of atrial flutter off of antiarrhythmic drugs. Saoudi reported a similar result in patients with refractory atrial flutter treated with direct current ablative therapy (16). The prospect of being able to ablate atrial flutter without production of heart block is appealing, and merits further study.

The results of catheter ablation in ventricular tachycardia have been mixed. Most patients with ventricular tachycardia suffer from reentrant arrhythmias originating in tissue in and around a zone of scarring from previous myocardial infarction. Attempts to ablate the common form of ventricular tachycardia in these patients have generally been disappointing. In contrast, several less common subtypes of ventricular tachycardia have been treated successfully through catheter ablation. These include tachycardia due to reentry within the bundle branches in patients with dilated cardiomyopathies (17), tachycardia due to foci in the right ventricular outflow tract in patients who have exercise-related ventricular tachycardia and structurally normal hearts (18), and fascicular tachycardia (19). We have not yet attempted catheter ablation in any patients with ventricular tachycardia, but the technique appears very promising in those with tachycardia from bundle branch reentry or the right ventricular outflow tract.

Safety

The reported rate of complications from radiofrequency catheter ablation is relatively low, but a variety of problems can develop, and some may be quite serious. Jackman reported a 1.8 percent incidence of potentially serious

complications in his series of accessory pathway ablations, including single cases of AV block, pericarditis, and cardiac tamponade (10). Calkins reported two significant complications in 102 patients (11). One of these patients suffered a myocardial infarction after inadvertent ablation within a coronary artery, and one patient required permanent pacing for complete heart block. Other potential complications include thromboembolic events, proarrhythmia, bleeding, and other vascular complications secondary to arterial and venous cannulation. To this list must be added the risks of radiation exposure, given the duration of some of these procedures (20).

We have detected two asymptomatic pericardial effusions on post-procedure echocardiograms in our series of 15 ablation procedures. The first patient (and the first patient in our series) had a nephrotic syndrome, and did not have a pre-ablation echocardiogram available for comparison. In the second patient, the effusion was shown to coincide with the procedure. Neither was associated with a pericardial rub or hemodynamic compromise. We have had no cases of unintended heart block, thromboembolism, myocardial infarction, or other significant problems.

Future directions

Techniques of radiofrequency catheter ablation are likely to undergo continued refinement. The ability to monitor the temperature of the catheter tip during ablation may be beneficial, and lessen the risk of coagulum formation during current delivery. Newer catheters with large distal electrodes and deflectable tips have already been developed and are commercially available. These have been quickly adapted into clinical use, and are of great assistance in performing these procedures. Further technical developments are likely, which should allow us to better tailor the equipment to the needs of individual patients. Additional studies should help clarify the potential role of low-energy direct current shocks as an adjunct or alternative to radiofrequency ablation in special situations (21).

Acknowledgement

We are grateful for the assistance and dedication of the technical and nursing staff of the cardiac catheterization laboratories, and to the many physicians who have shared with us in the care of these patients.

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Coronary artery bypass in two patients with immune thrombocytopenic purpura without preoperative splenectomy

STEVEN J. JUBELIRER, M.D.
Clinical Professor of Medicine, Cancer Center of Southern West Virginia, Charleston Area Medical Center, Division of Hematology/Oncology, West Virginia University, Charleston Division Charleston

Abstract

Two patients with severe coronary artery disease and idiopathic thrombocytopenic purpura underwent coronary artery bypass grafting without preoperative splenectomy. The patients' thrombocytopenia and bleeding were controlled with platelet transfusion alone. This report indicates that the use of cardiopulmonary bypass in patients with immune thrombocytopenia does not invariably mandate splenectomy, particularly in those in whom performance of a splenectomy may be associated with an increased risk of intraoperative cardiac morbidity.

Introduction

Cardiac operations requiring cardiopulmonary bypass have been safely performed in patients with a variety of coagulation disorders, but reported experience in patients with idiopathic thrombocytopenic purpura (ITP) is limited. This report describes the management of two patients with ITP who underwent surgical revascularization without splenectomy.

First case

A 57-year-old white female with known stable angina for four years had a one-month history of angina decubitus and an abnormal thallium stress test. Coronary angiography revealed occlusion of the left anterior descending coronary artery, an 80 percent stenosis of the short segment of the left circumflex artery and 75 percent narrowing of the midportion of the right coronary artery.

The patient's past medical history included a diagnosis of discoid lupus, obesity, and 25 years of smoking. The patient denied a history of hypertension or diabetes. Her medications on admission were Inderal, Nitroglycerin patch, and Isordil.

The physical examination was remarkable for a grade I/VI systolic ejection murmur loudest in the second right intercostal space, an S4 gallop, and a liver palpable 4 cm. below the right costal margin. No splenomegaly was noted. The remainder of the physical examination was normal.

Laboratory evaluation on admission included the following: WBC 5,800 with a normal differential; hematocrit 40 percent; hemoglobin 13.9 g/dl; platelet count 54,000/MM^3; bleeding time 11 minutes; prothombin time 13.2 seconds (control 11-13 seconds); partial thromboplastin time 26 seconds (control 20-30 seconds), fibrinogen 267 mg/dl, and thrombin time 10.7 seconds (control 10-12 seconds). Examination of the peripheral blood smear revealed a decreased number of large platelets and normocytic, normochronic red cells. The bone marrow aspirate demonstrated an increased number of megakaryocytes. The level of platelet-associated IgG was increased.

One day after admission, the patient had worsening angina and was referred for coronary artery bypass grafting. A repeat platelet count was 49,000 and Prednisone 80 mg. was started. In preparation for surgery, 15 units of platelets were infused and the platelet count two hours later was 166,000. A preoperative splenectomy was not performed.

The patient underwent a three-vessel coronary bypass procedure. The cardiopulmonary bypass time was 120 minutes. At the conclusion of the cardiopulmonary bypass, the patient's intraoperative platelet count was 66,000.

Ten units of platelets were subsequently given and six hours postoperatively, the platelet count was 110,000. Two days postoperatively, the platelet count dropped to 35,000 and an increase in chest tube drainage was noted. Eight units of platelets were infused and a platelet count 12 hours later was 73,000. The chest tube drainage decreased significantly. One week postoperatively, the patient developed a large pericardial effusion requiring surgical drainage. The preoperative platelet count at that time was 40,000. Bacterial and AFB cultures, gram stain, and cytology of the fluid was negative. The effusion was felt to be secondary to the patient's prior surgery and thrombocytopenia. She then received 10 units of platelets and four hours later, her platelet count was 92,000. She improved and no further bleeding or pericardial effusion was noted during the remainder of her hospital stay.

At discharge, the patient's platelet count was 50,000/mm^3 off steroids; at one month after discharge, it was 110,000/mm^3. A stress test one year postoperatively showed no evidence of ischemia and a platelet count at that time was 106,000.

Second case

A 62-year-old white male had suffered an anteroseptal myocardial infarction in 1989. A cardiac catheterization at that time revealed triple-vessel coronary artery disease including 50 percent-60 percent left main stenosis.

This patient's CBC revealed a white blood cell count (WBC) of 10,700 with a normal differential, hemoglobin of 13.7/dl, and platelet count of 56,000/mm^3. A bone marrow aspiration revealed increased megakaryocytes. Clotting studies (i.e. prothrombin time, partial thromboplastin time, and fibrinogen) were normal. A liver-spleen scan revealed no splenomegaly. His only medications at that time had been Propranolol and Isordil[8]. Due to his thrombocytopenia, it was felt that he was high risk for either balloon angioplasty or coronary artery bypass surgery and was treated medically.

He did well until August 1990 when he started having symptoms of unstable angina. He was admitted to a local hospital in September 1990 and found to have an inferior wall myocardial infarction. The patient, however, continued to have post-infarction angina and was transferred to Charleston Area Medical Center (CAMC). An emergency cardiac

catheterization revealed 80 percent-90 percent left main artery stenosis, more than 90 percent stenosis of the left anterior descending coronary artery, 90 percent occlusion of the right coronary artery, and occlusion of two marginal branches of the circumflex coronary artery. A 2-D echocardiogram revealed inferior wall akinesia.

A CBC on admission revealed a WBC of 13,900 with 73 percent polys, 20 percent lymphs, 7 percent monocytes, hemoglobin 13.9 g/dl, and platelet count of 70,000. The peripheral blood smear was normal except for a decreased number of large platelets. A PT, PTT, fibrinogen, and bleeding time were normal. His only medications at the time of admission were Inderal, Cardiazem, and Procardia. Repeat bone marrow examination revealed a normal number of megakaryocytes.

Four days after admission, the patient underwent a four-vessel coronary artery bypass graft. The pre-operative platelet count was 76,000. The cross clamp time was 32 minutes and pump time, 94 minutes. After coming off cardiopulmonary bypass, the patient was given 20 units of platelets because of generalized oozing. A platelet count two hours later was 141,000. The patient had no excessive bleeding postoperatively and required no further platelet transfusion. He was discharged with a platelet count of 89,000.

Discussion

The repeated experience with cardiopulmonary bypass in patients with ITP is limited. Only four cases have been reported (1-4). In three of the cases (1-3), two involving mitral valve replacement and one involving primary repair of an atrial septal defect, splenectomy was performed prophylactically before the cardiac surgery. No complications were reported in those cases. In the one reported case in which coronary artery bypass grafting was performed without preoperative splenectomy, the patient's thrombocytopenia and bleeding were controlled with platelet transfusion alone.

Conflicting recommendations have been made regarding the role of platelet transfusion in the management of immune thrombocytopenia. Due to accelerated platelet destruction in patients with ITP, many authors have concluded that platelet transfusions are either useless (5), or should be reserved for life-threatening hemorrhage (6). However, several studies (7) have demonstrated that platelet transfusion may increase the platelet count immediately after transfusion in patients with ITP. In addition, in a significant number of these "successful" transfusions, satisfactory platelet count elevations are observed the day after transfusions.

Results in these patients show that cardiopulmonary bypass grafting may be performed in patients with ITP, and that platelet transfusion may be an alternative to prophylactic splenectomy. This alternative is particularly appealing in patients with serious coronary artery disease in whom performance of splenectomy have be associated with an increased risk of intraoperative cardiac morbidity.

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All persons designated as authors should qualify for authorship. Each author should have participated sufficiently in the work to take public responsibility for the concept.

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Tables (tabular listings) and figures (photos, drawings and charts) should be numbered, and the point of reference in the text indicated in parentheses, i.e. (Table 1), (Figure 10). Photos must be unmounted glossy prints in a 5 in. x 7 in. format or smaller. Black and white photos are preferred. Cost of printing photos in excess of four will be billed to the author. Each photo should have a label pasted on its back indicating its number, the author's name and an indication of its "top." Do not write on the back of photos, scratch or mar them with paper clips, or mount them on cardboard. Drawings and charts should be done in solid black on pure white.

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President's Page

Robert P. Pulliam MD.

Saying it (Does) (Does Not) make it so!

Recently, *The Charleston Gazette* gave a smile to Ms. Sally Richardson when she announced that HEC, the PEIA health insurance processor, had all claims processed within 17 days of receipt. Did the announcement make it so?

I quickly did an aged accounts receivable and found what I intuitively knew -- that 60 percent of the accounts were 60 days or more overdue. Every physician and health care provider in the state knew it wasn't so, but the announcement made it so -- at least for the newspaper and the public.

The fact is that government and other organizations with sound BYTE or news BYTE access influence public opinion by these methods. Announcing it makes it so! If it's on TV or in the newspaper it must be valid!

Are there other "issues" in which a similar attack has been used? What about the announced crisis in health care?

My past six months service on the Health Care Planning Commission's Task Force on Finance and Cost Control has more than anything else convinced me that we have the finest health care system in the world. While we all recognize that the system has some problems, it is not "broken" or in the "crisis" state defined by the BYTE BOYS. Saying it doesn't make it so!

Our job as physicians should be to emphasize that it is the best system in the world, justify our position with valid data, and work to correct the deficiencies we all recognize. Saying it only makes it so if the data is valid, reproducible, and properly interpreted.

Robert P. Pulliam, M.D.

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The winners

We have never had anyone like George Bush for turning out the vote, 37 million for him, 43 million against him, and 19 million against him and the other guy together.

This will be our first experience with a Yuppie administration. We will soon have an earful of cleverness on trendy subjects and a TV eyeful of beautiful people with permanent press smiles and clothes to match.

Medicine probably has no more to fear from the new administration than it did from the old. As a matter of fact, politicians have not been friendly with us for many years -- except perhaps at fund-raising affairs.

Those happy and prosperous Reagan years inflicted the worst damage of all on Medicine. There were no Anti-Medicine laws passed during those years, but the hounds of bureaucracy were unleashed on us, nipping, yipping, and howling balefully on our trail. We have been running and dodging and backtracking under both Reagan and Bush.

Some think we are now treed. Maybe there is just no place else to go. Are the hunters now going to shoot us and hang our pelt on the White House wall? Hardly.

They want to tame us, put a collar and leash on us, domesticate us, teach us to roll over and do tricks. How to do this is still their big problem. No one is quite certain how to go about slipping that collar on us.

Our big problem is that most of us still like our freedom. Some have tired and surrendered. To most, life in a cage at that zoo will just never make it. The hills and the mountains and the plains beyond are for us. Freedom continues to beckon. We won't be tamed.

Our congratulations go to Governor Caperton and soon-to-be President Clinton. Both won impressive victories at the polls. We do not believe the election results are in any way an endorsement of some yet to be heard medical care plan that either may have been mumbling about in the heat of campaign rhetoric.

Mr. Bush had no medical plan either. Medicine's interests were neither with nor against Mr. Bush. From what we could see, Medicine's interests were neither with nor against either Mr. Caperton or Mr. Clinton. We start with a clean slate in Charleston and in Washington.

Let us hope that candor and a free-spirited discussion on the problems of financing medical care will lead to enlightenment for all interested parties. We look forward to these discussions.

– SDW

An alternative view of health-care economics

I've never taken a course in economics, which may now become more evident, but I must speak my heart on something I do know about -- medical care.

We are told by national politicians that spending 12 percent of the gross domestic product for medical care is too much, is obscene, is unsustainable. How many people work in health care? About 6 percent of the total work force. Ok, now it doesn't seem so bad; it's only twice as much as it ought to be. What if there are more than 6 percent of the population deriving their income from "health care"? What about the insurance industry?

Thirty-five percent of your health insurance premium goes for "overhead." Those folks at the insurance agency aren't working on life insurance (you only die once in a lifetime); nor are they working on fire insurance (your chances of a house fire are even less); they're working on health insurance, harrassing you. In addition, Health and Human Services is the largest branch of the U.S. government. There are folks at OSHA and other agencies whose salaries are paid entirely by "health-care" dollars. If all these people are included, perhaps more than 12 percent of the population is dependent on health-care money, making it a bargain.

On the other hand, how do we know the 12 percent figure is accurate? Let's boil macroeconomics down to microeconomics for a minute. Suppose new patient Charlie Brown walks into your office with a medical problem. He has no insurance. You talk to him, examine him, and prescribe therapy. What is the cost for this new patient's visit? $65.

Now, suppose Charlie has insurance, a personal policy. He pays $100 month in premiums. His insurance company pays you the $65, and takes their usual $35 overhead. What is the cost of his medical care? A total of $165 -- the $100 he paid in premiums, and the $65 you received.

Now, suppose Charlie's company, ABC Widgets, pays $100 in insurance premiums for him to the insurance company, which pays you $65. What is the cost of his medical care? A total of $265 -- that's the $100 premium paid by the company, the $100 premium received by the insurance company, and the $65 paid to you for care. Is the same money being counted two or three times? I don't know, but I suspect that some overcounting is inevitable in our complex, third-party system.

What is the fate of medical costs? Money is a fungible commodity; my dollar is worth just as much as your dollar. In hospitals and nursing homes, as well as physician offices, it mostly goes for salaries. This money goes immediately back into the economy, buying houses, cars, consumer goods and services, no different than if it went into other agencies, such as bomb production, government grants, farm subsidies, or any use. What if the providers simply stored it away in banks and didn't buy anything? No worry -- the banks would lend it out to buy roads, shopping centers, businesses or lend it to home buyers, entrepreneurs, car buyers, etc. If they store it away in a mattress, there is a problem, but I see no evidence of that. There is a velocity of money and it's increasing.

Finally, let's look more closely at health-care costs. What are they? A large percentage is nursing home costs. We've made old age a disease. We've done away with poor farms and old-folks homes. Now, our elderly stay at "skilled" nursing homes. What I spend for food, clothing, and shelter for my family isn't health care, but it is for the elderly, the fastest growing segment of the population. A nursing home resident may spend $1,800 per month for domiciliary care, and $1 for medicine, but the full $1,800 is considered "medical care." When people had 18 children, they couldn't outlive all their kids; now they have 0-2 and often do; that's demography, not medicine.

One of my patients recently told me of his Black Lung hearing. He had six doctors who testified that he had Black Lung and the coal company had 10 doctors that testified he didn't, so he lost. All 16 opinions, plus laboratory testing ($800-$1,000) is "medical care" designed to try to win a governmental "entitlement" program.

"Defensive medicine" -- ordering tests and procedures to protect against suits, wastes millions of health-care dollars. Malpractice premiums average 5 percent of all revenues, and little goes to victims -- 5 percent of $900 billion is $45 billion.

Roughly 10 percent of health-care dollars goes for expenses of the health-care denial industry -- managed care, PRO's, etc. This is about $90 billion. No other country has this industry. People clamor for the "Canadian System" -- there is no "utilization review" in Canada. Doctors are allowed to practice medicine without having every decision scrutinized by a nurse with a computer. Twenty years of meticulous scrutiny has failed to yield a single honest or virtuous doctor whose every decision will not be automatically challenged by this industry. We could save $90 billion by elimination of this unproductive industry. A governmental study of managed care in cataract surgery in 1990 concluded that $10 was spent for every dollar "saved."

The problem, in a nutshell, is governmental interference. It follows that the solution is not increased governmental interference. Only the Libertarian party platform recognizes this fact, and calls for a disentangling of government from medicine.

Wallace D. Johnson, M.D.
Beckley

At Mid-Winter

Rockefeller, Farley to address future of doctor/patient relationships

A major highlight at this year's Mid-Winter Clinical Conference will be a combined Physician/Public Session entitled "Patients, and Their Doctors: What Does the Future Hold?" which will feature Senator **John D. "Jay" Rockefeller IV** and **George Farley,** chairman of the West Virginia Health Care Planning Commission.

Scheduled for Friday, January 22 at 7 p.m. at the Charleston House - Holiday Inn, the setting for all of the Mid-Winter Clinical Conference meetings, this session will include a 50-minute question and answer period following the presentations by Rockefeller and Farley.

Biographical information about these two speakers begins below and additional details about the Mid-Winter Clinical Conference and related seminars, which will take place from January 21-24, can be obtained by contacting Nancie Divvens at 925-0342.

Rockefeller

Farley

Panelists highlighted

Jay Rockefeller graduated from Harvard University in 1961 with a B.A. degree in Far Eastern languages and history. He also studied Japanese language at International Christian University in Tokyo for three years and Chinese language at Yale University.

In 1964, Rockefeller came to West Virginia to serve as a VISTA worker in Emmons and decided to make the state his home. Elected to a two-year term in the West Virginia House of Delegates in 1966, Rockefeller then served four years as secretary of state, three years as president of West Virginia Wesleyan College, and eight years as governor before being elected to his current role as a U.S. Senator.

During his years as a congressman, Rockefeller has focused on jobs, health care, support for education and literacy, economic development assistance, worker training, veteran benefits and access to air and rail transportation. In 1989, he authored legislation to reform the way physicians are paid under Medicare, and his legislation to expand Medicaid to cover home and community health care services was approved by Congress in 1990.

Rockefeller recently served as chairman of the Bipartisan Commission on Comprehensive Health Care (the Pepper Commission), and currently is chairman of the Subcommittee on Medicare and Long-Term Care; the Subcommittee on Health for Families and the Uninsured; Subcommittee on International Trade; Foreign Commerce and Tourism; Subcommittee on Surface Transportation; and the Subcommittee on Science, Technology and Space. In addition, Senator Rockefeller is chairman of the Senate Steel Caucus and the National Commission on Children, and also serves on the Senate Steering Committee on Democratic Policy.

George Farley is a native of Wood County who served with the United States Navy from 1948-52 during the Korean War, and then attended West Virginia Wesleyan College. A self-employed businessman, Farley has owned an insurance agency representing The State Farm Insurance Companies since 1962.

Farley was first elected to the West Virginia House of Delegates in 1970 and served on the Constitutional Revision Committee, Political Subdivision Committee, Banking and Insurance Committee, Roads and Transportation Committee, and the Finance Committee. The next time Farley was elected to the House of Delegates was in 1974, and he has been re-elected every term until this past election.

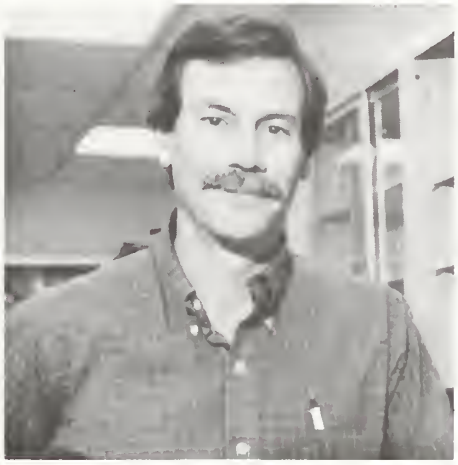
From 1985-1990, Farley served as chairman of the House of Delegates Finance Committee, co-chair of the House-Senate Budget Conference Committee, and was a member of the House Rules Committee and Joint Committee of Government and Finance. In 1991, Farley was appointed by Governor Caperton to serve as chairman of the West Virginia Health Care Planning Commission and to serve on the Advisory Panel of the Rural Health Initiative Site Selection. In addition, he was also appointed to the Legislature's Interim Committee on Uncompensated Care and Medicaid Expenditures.

A past president of the Regional Mental Health Association, Farley is a member of the National Association of Life Underwriters, the West Virginia Association of Life Underwriters, and the Parkersburg Life Insurance Underwriters.

Renown sleep disorders expert among speakers for Fourth Scientific Session at Mid-Winter

This year's "Potpourri of Topics," the Fourth Scientific Session at the WVSMA's Mid-Winter Clinical Conference, will feature three topics of discussion — "Molecular Biology for Practicing Physicians," "Chemotherapy in Node Negative Carcinoma of the Breast," and "Sleep Disorders." **William Dement, M.D., Ph.D.,** director of the Stanford Sleep Disorders Clinic and Research Center in Palo Alto, Cal., will be one of the featured presenters for this session, which will also include **Michael Miller, Ph.D.,** of the West Virginia School of Medicine and **Steven Jubelirer, M.D.,** medical director of the Cancer Care Center of Southern West Virginia.

Set for Sunday, January 25, at the Charleston House - Holiday Inn, this session will begin at 9 a.m. with Dr. Miller's lecture on "Molecular Biology for Practicing Physicians." Immediately following, Dr. Jubelirer will discuss "Chemotherapy in Node Negative Carcinoma of the Breast," and then the remainder of the session will be devoted to Dr. Dement's presentation on "Sleep Disorders."



Dr. Miller

Dr. Jubelirer

At the Canine Narcolepsy Colony he directs, Dr. Dement holds one of his patients named Tucker, who is in the midst of a catapletic attack. Cataplexy is the sudden decrement in muscle tone and loss of deep tendon reflexes leading to muscle weakness, paralysis or posture collapse.

Lecturers Spotlighted

Dr. Miller graduated from Albright College in Reading, Pa., in 1970 with a B.S. degree in biology and chemistry. He obtained his doctorate degree in biochemistry from Pennsylvania State University in Hershey, Pa., in 1975 and became a research associate at the Sidney Farber Cancer Institute in Boston.

After two years at Sidney Farber, Dr. Miller relocated to Morgantown to join the faculty at the WVU School of Medicine as an assistant professor in the Department of Biochemistry. In 1981, Dr. Miller was promoted to associate professor, in 1986 he became a full professor, and then in 1988 he accepted his current post as associate chairman of the Department of Biochemistry.

Voted Outstanding Teacher of the Year for 1979-80, Dr. Miller has published numerous articles and is a member of the American Society for Cell Biology and the American Society of Biological Chemists.

Dr. Jubelirer received his medical degree from the University of Cincinnati in 1974 and completed an internship and a two-year residency at the Georgetown University Medical Center in Washington, D.C. From 1977-80, he lived in Boston where he did a fellowship in hematology at Boston City Hospital for two years, then completed a one-year fellowship in hemostasis and thrombosis at Boston Veterans Administration Hospital.

In 1980, Dr. Jubelirer relocated to Charleston and joined the staff of the Charleston Area Medical Center where he is currently medical director of the Cancer Care Center of Southern West Virginia. Since 1980, Dr. Jubelirer has been executive secretary of CAMC's Cancer Committee and he is the director and founder of the Comprehensive Hemophilia Program at CAMC. He also serves as chairman of the section of hematology/oncology at CAMC and has been principal investigator of the West Virginia Community Clinical Oncology Program for the hospital since 1982.

A clinical professor of medicine at the WVU School of Medicine's Charleston Division since 1987, Dr. Jubelirer received the Clinical Faculty Award in 1988. He has had 15 articles published in the *West Virginia Medical Journal*, and has also had papers printed in *The New England Journal of Medicine, Cancer, American Journal of Kidney Disease, Laryngoscope* and other national journals.

In addition to being a member of the AMA and WVSMA, Dr. Jubelirer is also a member of the American College of Physicians, the American Society of Hematology, the American Society of Clinical Oncology, the American Society of Clinical Research and the National Council of Thrombosis.

Dr. Dement is a native of Washington who received his medical degree and doctorate degree in

degree and doctorate degree in neurochemistry from the University of Chicago. While he was a medical student, Dr. Dement began his career in sleep research when he joined the lab of Dr. Nathaniel Kleitman and helped discover and describe Rapid Eye Movement (REM) sleep. During the period from 1954-57, he described the relationship between REM sleep and dreaming, established the all-night sleep patterns in humans, discovered REM sleep in animals and newborn babies, and demonstrated that the patterns of specific rapid eye movements are related to the visual experience of the dream.

In 1963, Dr. Dement joined the Psychiatry Department at Stanford University, where for the past 28 years he has continued his studies on the neurochemistry of sleep and the functional significance of the different sleep states. Dr. Dement initiated a special narcolepsy clinic in 1964 through which he demonstrated that the syndrome of narcolepsy involves disordered REM sleep processes, and six years later he started the world's first Sleep Disorders Clinic which introduced all-night polysomnographic examination of patients with sleep-related complaints, medical responsibility and management of the patient.

At the clinic, Dr. Dement also began objective assessment of the relationship between nighttime sleep and daytime function for which he developed the Multiple Sleep Latency Test, which remains the standard diagnostic measure of daytime sleepiness. Dr. Dement and his colleagues were the first to understand the clinical implications and high prevalence of sleep apnea psychophysiological insomnia and drug dependency insomnia.

After discovering narcolepsy in dogs in 1973, Dr. Dement created the world's only research colony of animals with this disease. His basic research team has discovered and described neurochemical abnormalities associated with narcolepsy in dogs. Currently, his research is focusing on the biological clock which is located in a single brain structure (the suprachiasmatic nucleus) and can be kept alive in a dish, or transplanted from animal to animal.

Besides his work at the Stanford Sleep Disorders Clinic and Research Center, Dr. Dement is the Lowell W. and Josephine Q. Berry Professor of Psychiatry and Behavioral Sciences at the Stanford University School of Medicine. He was recently appointed by the Secretary of Health and Human Services Dr. Louis Sullivan to serve as chairman of the National Commission on Sleep Disorders Research. This commission is conducting a two-year study to present Congress with recommendations to determine the future of sleep research in the U.S.

Book Review

Strangers At the Bedside: A History of How Law and Bioethics Transformed Medical Decision Making

by David J. Rothman, Professor of Social Medicine, Columbia College of Physicians and Surgeons

We all have been struck by the changes which have taken place in our interactions with patients. David Rothman's book traces the origins of that change in splendid socio-political detail.

How is it that our relationship with our patients has been affected by the disappearance of the house call, by our super-specialization, by technology and the accelerated pace and rhythm of mrdical practice? Why does malpractice litigation play such a prominent role in the practice of medicine? How have the lawyers, the courts, and the legislatures gained control over professional lives?

Rothman's conclusions are interesting and thought provoking. The book reads like a novel and is well worth a few hours of time.

David Z. Myerberg, M.D.
Associate Professor of Pediatrics
WVU - Morgantown

WVSMA members to appear on new CAMC Health Show

Drs. Brittain McJunkin, N. Andrew Vaughan and Ronald J. McCowan, are among the guests scheduled to appear on upcoming episodes of the "CAMC Health Show," a new biweekly television show that is produced by Physician Support at the hospital.

The show, which is aired every other Tuesday, is shown live at 7 p.m. on Capitol Cablevision Channel 11 and is also replayed on Harmon Cable in the Cross Lanes and Winfield areas. Dr. McJunkin will be the guest on December 1 and discuss "Digestive Disorders;" Dr. Vaughan will be featured on the January 26 program entitled "Women and Heart Disease;" and Dr. McCowan will focus on "Heart Disorders" for the show which will be broadcast on February 9.

Williamsburg, Snowshoe sites for ACC seminars

The American College of Cardiology has scheduled two seminars to be held in December and February.

The first meeting, "Williamsburg Conference on Heart Disease," is set for December 6-9 at the Williamsburg Conference Center in Williamsburg, Va. Eighteen Category 1 CME credits will be offered.

The ACC's second upcoming educational event is entitled "Cardiovascular Conference at Snowshoe," and will be conducted February 1-3 at the Mountain Lodge Conference Center in Snowshoe, W.Va. Attendance at this meeting earns 13.5 Category 1 CME credits.

For more information about these conferences, phone the ACC registration secretary at 1-800-257-4739.

Neurosurgical Society plans winter meeting at The Homestead

The 27th Annual Meeting of the Neurosurgical Society of the Virginias will be held at The Homestead, Hot Springs, Va., January 14-16.

Further information about the meeting may be obtained through Dr. Ralph Dunker at (703) 982-1149.

1993 MID-WINTER SEMINARS & WVSMA/WVCACP SCIENTIFIC CONFERENCES JANUARY 21-24, 1993

at the
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THURSDAY SEMINARS & SCIENTIFIC SESSION:

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"Current Issues in Geriatrics and Long-Term Care"

"Molecular Biology"/"Chemotherapy"/"Sleep Disorders"

REGISTRATION FORM: 1993 Mid-Winter Seminars & WVSMA/WVCACP Scientific Conferences

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Mid-Winter Clinical Conference ____ $ 75 members ____ $150 non-members

Residents, Students, Nurses and PAs - NO CHARGE

Constituent Skills Workshop ____ $ 50 members ____ $ 85 non-members

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Continuing Medical Education

Listed on this page are some of the upcoming CME programs which will be held in the state.

The programs this month were compiled by: Robin Rector, coordinator for CME for Charleston Area Medical Center; Kari Long, program director of CME and rural services for WVU; and Thelma Wilson, education coordinator for Raleigh County Medical Society.

Futher details about these CME activities may be obtained by calling Rector at 348-9580; Long at 293-3937; and Wilson at 255-6341.

If you would like to have the CME programs offered by your institution or association for physicians printed in the *Journal*, please contact Nancy Hill, managing editor, at 925-0342.

CAMC/WVU Health Sciences Center - Charleston

Dec. 14 - "Sexually Transmitted Diseases," (teleconference), 12:30 p.m. - 1:30 p.m., WVU Health Sciences Center, Room 2014AB

West Virginia State Medical Association - Charleston

Dec. 3 - "Marbury vs. Madison: Third Generation Loss Control Seminar," Charleston Marriott Hotel

Raleigh County Medical Society - Beckley

Dec. 3 - "Hypertension in the Elderly: More Than a Numbers Game," Thomas von Dohlen, M.D., 6:30 p.m., Black Knight Counrty Club

Outreach Programs

Key to Sponsors

★ *WVU Health Sciences Center, Morgantown*

☐ *CAMC/WVU Health Sciences Center, Charleston*

Fairmont ★ Fairmont Clinic, Dec. 16, "Premenstrual Syndrome, "Carol Paris, M.D.

Man ☐ Man Appalachian Regional Hospital, Dec. 15, 7 p.m., "Health Promotion and Disease Prevention in the Elderly or Eight Questions Your Elderly Patients May Ask," Mark Newbrough, M.D.

Martinsburg ★ VA Medical Center, Dec. 3, 3 p.m., "Alzheimers Disease," Robert Keefover, M.D.

Montgomery ★ Montgomery General Hospital, Dec. 2, 12:30 p.m., "Arrythmia Interpretation Management," Ronald McCowan, M.D.

New Martinsville ★ Wetzel County Hospital, Dec. 10, 11:30 a.m., TBA

Parkersburg ★ Camden-Clark Memorial Hospital, Dec. 9, 7 a.m., "Pulmonary Tuberculosis," Raymond Smego, M.D.

Philippi ★ Broaddus Hospital Association, Dec. 10, 7 p.m., "Chest Trauma," Ronald Hill, M.D.

Ripley ☐ Jackson General Hospital, Dec. 11, noon, "West Virginia Sinus Disease," Blair Thrush, M.D.

Spencer ☐ Roane General Hospital, Dec. 15, 12:30 p.m., "Clinical Health Psychology," Paul Blanton, Ph.D.

White Sulphur Springs ★ The Greenbrier Clinic, Dec. 28, 4 p.m., "Evaluation of Abdominal Aortic Aneurysms," Kenneth Granke, M.D.

Electromyography and Nerve Conduction Studies.

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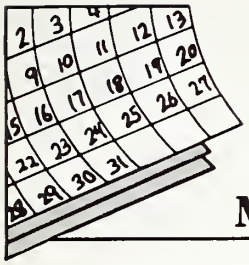


Medical Meetings

November

29-Dec. 4—77th RSNA Scientific Assembly and Annual Meeting, Chicago

December

3—Joining a Partnership or Group Practice, AMA (sponsor), Chicago
4—Silicone-Related Disorders: A Symposium, George Washington University Medical Center, Washington, D.C.
4-5—Association of Reproductive Health Professionals, Scottsdale, Ariz.
4-6—Adolescent Sexuality: Helping Youth Cope, The Menninger Clinic, Topeka, Kan.
4-8—American Society of Hematology, Anaheim, Cal.
5—Laparoscopy and Thorascopy in Cancer Management, University of Texas and M.D. Anderson Cancer Center (sponsors), Houston
5-6—Nutrition for Clinical Practice and Everyday Living: 1992, Ohio State University, Columbus
6-8—Hot Topics in Neonatology 1992, Special Ross Conference, Washington, D.C.
6-9—Williamsburg Conference on Heart Disease, American College of Cardiology (sponsor), Williamsburg, Va.
7—Overview of Infections and Anti-Infective Therapy, PharmaDesign (sponsor), Philadelphia
8-Major Bacterial Infections, PharmaDesign (sponsor), Philadelphia
12—Successful Money Management, AMA (sponsor), Chicago
17—Gearing up for Retirement, AMA (sponsor), Chicago
27-31—Advances in Internal Medicine, George Washington University Medical Center (sponsor), Big Sky, Mont.

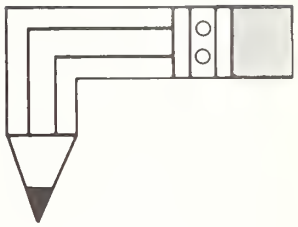
January

10-12—Third Primary Care Research Conference, Agency for Health Care Policy and research (sponsor), Atlanta
16-17—Advanced Trauma Life Support Student® Course, Georgetown University Medical Center (sponsor), Washington, D.C.
16-23—Topics in Hematology and Oncology, George Washington University Medical Center (sponsor), St. Martin, French West Indies
21-24—WVSMA's Mid-Winter Clinical Conference, Charleston

For More Information . . .

Contact the Journal at (304) 925-0342 for additional information about most of the above meetings.

Poetry Corner



Hey, Doc! Remember Me?

What sort of egotism causes doctors to suppose
My time's of little value? Do they really think it goes
Without apology to let me sit all day and wait
For my appointment with a doctor who is always late?
If there's good reason why I wait, like your day's hectic pace,
Explain, don't just ignore. I'll try to take it with good grace.
And will you kindly book appointments with a schedule you can keep?
Then patients won't be herded like a flock of stupid sheep.
Patients need a doctor who will see them as a whole
And treat not only symptoms, but those fears within the soul.
I'm not a broken leg, a case of flu, a skin disease.
I'm human, with a problem that I'm hoping you can ease.
I'd like to think you care about your patients and their fate.
Are doctors still compassionate, or is caring out of date?
So when you set my broken bone, remember it's connected
To all the rest of me. My whole being is affected.
If you will just do unto me as you'd be done unto.
I may become your biggest fan and send my friends to you.

Author Unknown

Please address your submissions for Poetry Corner to:
Stephen D. Ward, M.D., Editor
West Virginia Medical Journal
Box 4106
Charleston, WV 25364.

This page of material is submitted and paid for by the Bureau of Public Health.

West Virginia's injury death rates higher than nation's figures

Unintentional injury continues to be the leading cause of premature deaths in both West Virginia and the nation. In fact, between the years of 1986 and 1990, West Virginians died from unintentional injuries at a rate 24 percent higher than the national rate, while state deaths from all injuries exceeded the nation by 12 percent.

These figures are according to a new report released by the Bureau of Public Health's Office of Epidemiology and Health Promotion. The report, "West Virginia and the United States: A Comparison of Injury Mortality Rates," states that the leading causes of death due to unintentional injuries include motor vehicle accidents, falls, fires and burns, non-boat related drowning, choking and poisoning.

State health officials say the statistics in this report indicate that more activities must be developed to prevent the growing number of unintentional injuries in West Virginia. One effort to lower the overall number of injuries in the state has been to form the West Virginia Injury Control Coalition this past spring. Coalition members are currently evaluating the impact of injuries in the state and will be developing a plan to address prevention issues.

For more details about injury issues in West Virginia or for a copy of the report, contact the Office of Epidemiology and Health Promotion at 558-9100.

State receives grant to better trauma care

The Bureau of Public Health recently received more than $150,000 to improve trauma care around the state. The grant was awarded to the Office of Emergency Medical Services from the U.S. Department of Health and Human Services.

With the new monies, two trauma coordinators will be hired to work out of the state's EMS area offices. The coordinators will help write triage protocols to provide consistent treatment procedures for trauma patients, and will work to improve the categorization and trauma center designation in hospitals.

A nurse/patient tracking coordinator will also be hired to establish a procedure to obtain follow-up data on trauma patients. Patients will be tracked from trauma centers to rehabilitation facilities, nursing homes, home care or even back to work.

Hospital trauma personnel will receive information on the statewide Hospital Trauma Registry, and emergency personnel in rural areas of the state will have opportunities to improve their skills through specialty training courses to be offered in Advanced Cardiac Life Support, Pediatric Advanced Life Support and Advanced Trauma Life Support.

For more information about these grant activities or the Office of Emergency Medical Services, call 558-3956.

New rural health care programs underway

The Bureau of Public Health continues to place a strong emphasis on the rural health care needs around West Virginia. The Office of Community and Rural Health Services (OCRHS) oversees rural health activities and has several new initiatives underway.

A grant of $60,000 was recently awarded to the OCRHS by the Appalachian Regional Commission to help rural, underserved communities recruit and retain health care professionals. The grant, which will be matched with an additional $30,000 by the Bureau, calls for primary care centers, local health departments, hospitals, medical schools and various state agencies to work together to establish integrated programs to address health manpower shortages.

A six-month study was begun in September to look at different models of regionalized community care networks. The study will focus on links between health care providers, the financial impact of cooperation, and the effect of network development access. In addition, it will accentuate the policy barriers to community care network development and address barriers in state policies.

Through the Office of Rural Health Policy, the OCRHS is hoping to work with other groups to initiate some joint rural health activities around the state, improve communications and maximize resources. Plans call for a joint newsletter and a statewide rural health conference.

For more information on rural health activities, contact the OCRHS at 558-3210.

County health profile report to be released

The Office of Epidemiology and Health Promotion (OEHP) will soon release its latest issue of the West Virginia County Health Profiles. The report is an overview of the health and socioeconomic status of West Virginians which gives the statistics not just on a statewide but a county basis.

This profile features a county-to-national comparison of 28 selected health indicators, including mortality rates, behavioral prevalence and birth and prenatal care measures. This information is provided every few years to allow counties to more accurately identify and address specific problems among their residents.

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Compiled from material furnished by the West Virginia University Health Sciences Center, Communications Division, Morgantown.

Emergency physicians to train at WVUH

The new emergency residency program which WVUH will be initiating in 1993, will be only the second of the nearly 100 such programs in the United States which is located in a hospital serving a primarily rural population.

WUU's proposal to establish a residency was certified recently by the Residency Review Committee of the American Council for Graduate Medical Education and six physicians will be accepted each year. In addition to their training at WVUH, these residents will also study at the Charleston Area Medical Center and Wheeling Hospital during their second and third years.

Raich elected chair of Cancer Committee

Dr. Peter C. Raich, professor of medicine and section chief of hematology/oncology, has been elected chair of the West Virginia Cancer Registry Advisory Committee. This committee is responsible for providing oversight and input regarding the scope and direction of the registry, in addition to assuring wide distribution and full use of the data generated.

The registry, directed by the West Virginia Bureau of Public Health, works closely with established hospital-based registries and encourages other hospitals to initiate their own registries. In the future, the registry will be an asset in evaluating trends in cancer incidence and patterns of cancer care within the state.

Fred Butcher, Ph.D., director of the Mary Babb Randolph Cancer Center, and Betty Garlow, A.R.T., C.T.R., tumor registrar at Ruby Memorial, are members of the advisory committee.

Kaufman writes book, lectures extensively

Dr. Howard Kaufman, professor and chair of neurosurgery, has written a book entitled "Treatment of Intracerebral Hematomas" which will be published this spring.

In addition to completing his book, Dr. Kaufman recently presented two lectures. In August, he discussed modern developments in the treatment of head injuries at the 125th Annual Meeting of the West Virginia State Medical Association. On September 9, he spoke about the treatment of intracerebral hematoma at a meeting of the Congress of International Stroke Society which was held in Washington, D.C. This is the same topic he will be discussing at the Princeton Conference, a biannual research society meeting sponsored by the National Institutes of Health in Detroit.

Dr. Kaufman is also initiating a multi-institutional study which includes Massachusetts General Hospital, Washington University in St. Louis, Texas Southwestern, and the University of Southern California.

EM faculty members attend ACEP scientific assembly in Seattle

Several Emergency Medicine faculty members attended the American College of Emergency Physicians (ACEP) Scientific Assembly in Seattle in September.

Dr. Rick Blum, associate professor, attended the meeting as president and councilor for the state chapter; Dr. Scott Frame, assistant professor, attended as faculty for "Emergency Pediatric Procedures;" and Dr. John Prescott, assistant professor, attended as councilor for the Section of Rural Emergency Medicine and presented a two-hour lecture "Rural Emergency Medicine - Challenges and Opportunities." Also attending the meeting was Dr. William Rose, associate professor of emergency medicine.

Several faculty serve on examining boards

Three Department of Ophthalmology faculty members, Drs. John V. Linberg, Stephen R. Powell and Robert O'Connor, are serving as associate examiners of the American Board of Ophthalmology (ABO), and three other faculty have recently completed or are currently serving on national examining boards.

Dr. Howard H. Kaufman, professor and chair of neurosurgery, served as a guest examiner of the American Board of Neurological Surgery in May; Dr. Stephen Wetmore, professor and chair of otolaryngology, was a guest examiner for the American Board of Otolaryngology in March; and Dr. Eric T. Jones, clinical professor and interim vice chair for clinical services, has been an examiner for the American Board of Orthopedic Surgery since 1985.

Study explores attitudes about mental illness

Few West Virginians object to having people with mental illnesses living in their communities, according to a survey taken by students in the P.I. Reed School of Journalism at WVU.

The students surveyed nearly 200 people in 48 of West Virginia's 55 counties by telephone and found:

- 94 percent agree that persons with mental illnesses can become productive members of society.
- 90 percent said metal illness can be treated professionally.
- 89 percent said they would not object to a mentally ill person living in their community.
- 66 percent said they knew someone who had sought the services of a mental health professional.
- 53 percent said government should care for mentally ill persons; 47 percent said it was a family responsibility.
- 52 percent said the community is the best place for treatment; 48 percent support hospitalization in a state facility.

The survey was requested by the coalition-building subcommittee of Mental Health Task Force at the 1991 West Virginia Rural Health Conference.

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Marshall University School of Medicine

Compiled from material furnished by the Office of University Relations, Marshall University, Huntington.

Lincoln County seniors benefitting from outreach project

Six months after a rural outreach program was added to Marshall's 8-year-old, 22-site occupational therapy program, about a dozen Lincoln County seniors are getting regular home visits as part of the Benedum Geriatrics Program.

An occupational therapist and an OT assistant, with the help of two OT students doing field work at Marshall, have been helping people live more comfortable and normal lives through physical activities, changes in the home environment, and special adaptive equipment.

The presence of these individuals helps senior citizens live better and live at home longer, says Michael Grome, a physician assistant who works with the Benedum Geriatrics Program at the Lincoln Primary Care Center.

"They've helped us not only with recommendations on things like range-of-motion exercises but also in advising us of aids that help keep the patient in the home longer rather than being transferred to a nursing home," Grome said. "They have even been able to provide some splints and other things we would never have been able to use or even known were available. They have bent over backwards to help our patients."

Deborah Bragg, director of nursing at the Lincoln Continuous Care Center, said the program also has been valuable there.

"They've done a very fine job in assessing our residents, and they've found some problems we're working to fix with their help," Bragg said.

Treatment is very individualized, according to Sharon Pape, OTR/L. For example, at the nursing home, splints are being used to help keep the joints of immobile patients from locking into contractures, and in patients' homes such measures as gentle exercises, grab bars, or relocating a potentially hazardous throw rug are being taken.

"People are sometimes surprised that we go to the home, but that's where it needs to happen; that's their life," Pape said. "It allows you to take more time, and it's worth it. You get a much better understanding of what this person wants and needs."

According to Pape, one of their best-received activities is family support and caregiver training. "A lot of folks have caregivers who stay with them during the day, and we can suggest, 'Do this' or 'Help the patient this way.' I think often the families are even more appreciative than the patients themselves, because it helps them know that even though their parents are getting older, there are ways to make it easier for them to have a more fulfilling life."

Ultimately, the goal of occupational therapy is to help patients do the things that are meaningful to them in spite of their physical limitations.

"It really makes a difference for people," said Vivian Maggard, COTA. "It's a real plus for them to be able to get out of bed and into their favorite chair or to be able to go their own bathroom instead of a commode chair in the living room. It helps give them back their independence and their dignity."

The rural program also added an important educational dimension for the visiting occupational therapy students, said Elizabeth Devereaux, director of the occupational therapy program at Marshall.

"The curriculum for occupational therapy students calls for an experience exposing them to the psychosocial aspects of treatment," Devereaux said. "Many places focus primarily on psychiatric cases for this requirement, but every patient's rehabilitation and emotional needs are closely intertwined. We tried to generate a whole new concept based on looking at typical patients holistically.

"Certainly their experience in Lincoln County will better enable them to meet the wide variety of needs their rural patients in the future will have. And since West Virginia has the lowest ratio of therapists to population of any of the 50 states, we especially hope this experience will encourage them to return here to practice," Devereaux added.

Mufson elected to APM governing council

Mufson

Dr. Maurice A. Mufson, chairman of the Department of Medicine, has been elected to the governing council of the Association of Professors of Medicine.

Dr. Mufson was elected to the office of councilor, one of six leadership positions. Other members of the council represent Harvard University, Johns Hopkins University, the University of Chicago, Syracuse University and the University of Alabama.

The association, made up of chairmen of departments of medicine at all 126 United States medical schools, provides the primary leadership and direction to academic internal medicine, including education, research and patient care.

A graduate of the New York University School of Medicine, Dr. Mufson has been chairman of Marshall's Department of Medicine since 1976.

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Keep the momentum

From only 50 members in 1990 to well over 200 in 1992, the influence and activities of the WVSMA Medical Student Section have increased tremendously; however, we still have room to grow. With this thought in mind, I want to give you an update on some of the recent endeavors in which our voice has made a difference, as well inform you of a future event in which we need to be involved.

At the WVSMA's 125th Annual Meeting in August, the MSS submitted two resolutions to the House of Delegates. The first resolution was passed and it made provisions for funding a medical student to participate as a delegate at the annual AMA meeting in Chicago. My attendance at the AMA meeting in June was the first time in eight years that the medical students of West Virginia had been represented at this convention, and this resolution will assure that future student leaders will also be able to participate.

WVSMA-MSS President Kevin Kaufman talks with AMA President John Clowe following his address at the WVSMA's 125th Annual Meeting. Waiting to speak with Dr. Clowe is Dr. Rajnikant Shah of Beckley.

The second resolution put forth by the MSS dealt with providing the opportunity for incorporating osteopathic students into the MSS in order to promote a more unified voice in West Virginia. The House of Delegates did not pass this resolution because they are already considering a motion, which was also made this year, to include osteopathic physicians as members of the WVSMA. This resolution would require a change in the WVSMA's Constitution since it specifically states that an osteopathic physician cannot be a member of the WVSMA unless they have completed an allopathic (LCGME) residency program and are eligible or board certified by an allopathic specialty board, have passed the FLEX examination, or have become a diplomate of the National Board of Medical Examiners. Since any proposed change in the Constitution requires a layover of a year by the House of Delegates before it is actually put to a vote, it will not be brought to the floor again until the WVSMA's 126th Annual Meeting in 1993. If this resolution then passes, the resolution which the MSS proposed would become superfluous since osteopathic physicians would be allowed to join the WVSMA, so would osteopathic medical students.

Another meeting where MSS involvement will play a key role, will be the WVSMA's Mid-Winter Clinical Conference which will be held from January 21-24 at the Charleston House - Holiday Inn. During this event, the annual meeting of the MSS will be held to conduct elections and discuss relevant issues. To maintain our current course of solid growth, I hope as many members as possible will be able to attend and give their input. Please see this page in next month's *Journal* for more details regarding this important event. In addition, each medical student will be mailed a letter and informational brochure.

Thank you very much and I strongly encourage your continued involvement in all aspects of the MSS.

Kevin Kaufman, MSIII
President, WVSMA-MSS

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Steven A. Smith, D.O.
UHC Emergency Dept.
Box 1680
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David Weinsweig, M.D.
2828 1st Avenue #400
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County Societies

McDowell

At the September meeting of the society, Dr. Robert Bear, a cardiologist from Bluefield, discussed "Current Concepts in the Treatment of Elevated Cholesterol."

Following Dr. Bear's presentation, Secretary-Treasurer Dr. Michaelis reported that a $1,000 contribution had been given to the McDowell Public Library and the McDowell County Humane Society.

At their next meeting on October 7, the members were shown a video on "Dealing with Depression: Taking Steps In the Right Direction," which was presented by Tom Griesmer of Roerig Pratt Pharmaceuticals. Mr. Griesner also answered questions about the drug Zoloft.

Members unanimously passed a motion to donate $100 to Mission Ministries and discussed helping Hospice Care of Mercer County, Inc. with a contribution to open a McDowell County branch. Also discussed at the meeting were the WVSMA's goal of increasing membership, and the importance of attending HCPC's public hearing in Welch and the WVSMA's CME workshop in Charleston.

In addition, Dr. Michaelis appointed a nominating committee to create recommendations for officers for 1993.

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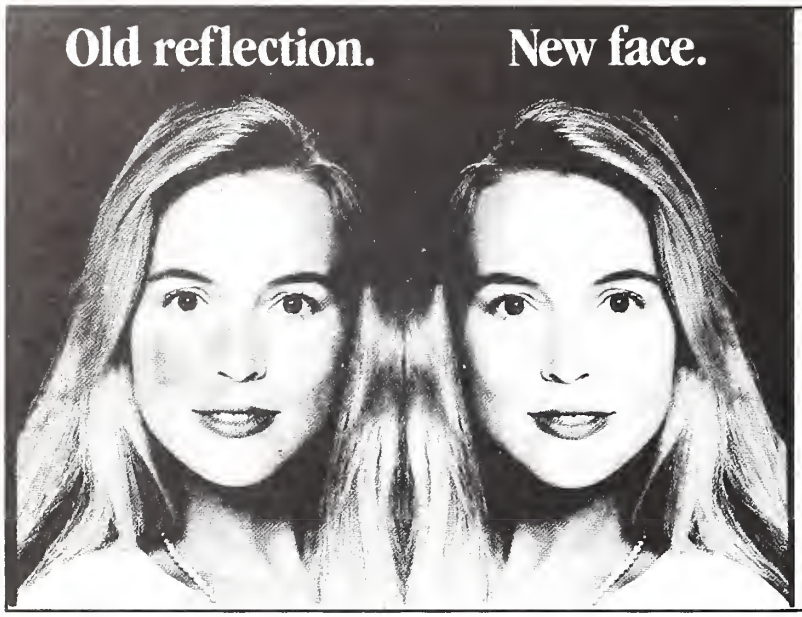

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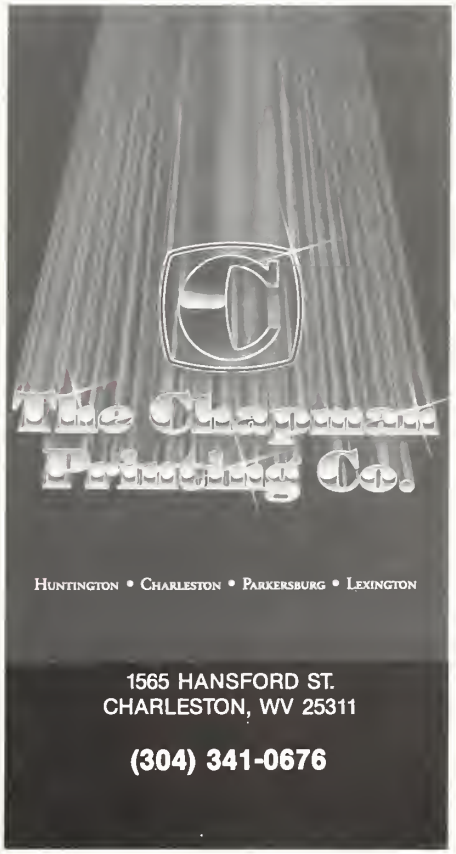

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References: 1. Data on file, Searle. 2. Edmonds D, Würth JP, Baumgart P, et al. Twenty-four-hour monitoring of blood pressure during calcium antagonist therapy. In: Flechenstein A, Laragh SH, eds. *Hypertension—the Next Decade: Verapamil in Focus*. New York, NY: Churchill Livingstone; 1987:94-100. 3. Midtbø KA. Effects of long-term verapamil therapy on serum lipids and other metabolic parameters. *Am J Cardiol*. 1990;66:13I-15I. 4. Fagher B, Henningsen N, Hulthén L, et al. Antihypertensive and renal effects of enalapril and slow-release verapamil in essential hypertension. *Eur J Clin Pharmacol*. 1990;39(suppl 1):S41-S43. 5. Schmieder RE, Messerli FH, Garavaglia GE, et al. Cardiovascular effects of verapamil in patients with essential hypertension. *Circulation*. 1987;75:1030-1036. 6. Midtbø K, Lauve O, Hals O. No metabolic side effects of long-term treatment with verapamil in hypertension. *Angiology*. 1988;39:1025-1029.

BRIEF SUMMARY

Contraindications: Severe LV dysfunction (see *Warnings*), hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no pacemaker is present), 2nd- or 3rd-degree AV block (if no pacemaker is present), atrial flutter/fibrillation with an accessory bypass tract (eg, WPW or LGL syndromes), hypersensitivity to verapamil.

Warnings: Verapamil should be avoided in patients with severe LV dysfunction (eg, ejection fraction < 30%) or moderate to severe symptoms of cardiac failure and in patients with any degree of ventricular dysfunction if they are receiving a beta-blocker. Control milder heart failure with optimum digitalization and/or diuretics before Calan SR is used. Verapamil may occasionally produce hypotension. Elevations of liver enzymes have been reported. Several cases have been demonstrated to be produced by verapamil. Periodic monitoring of liver function in patients on verapamil is prudent. Some patients with paroxysmal and/or chronic atrial flutter/fibrillation and an accessory AV pathway (eg, WPW or LGL syndromes) have developed an increased antegrade conduction across the accessory pathway bypassing the AV node, producing a very rapid ventricular response or ventricular fibrillation after receiving I.V. verapamil (or digitalis). Because of this risk, oral verapamil is contraindicated in such patients. AV block may occur (2nd- and 3rd-degree, 0.8%). Development of marked 1st-degree block or progression to 2nd- or 3rd-degree block requires reduction in dosage or, rarely, discontinuation and institution of appropriate therapy. Sinus bradycardia, 2nd-degree AV block, sinus arrest, pulmonary edema and/or severe hypotension were seen in some critically ill patients with hypertrophic cardiomyopathy who were treated with verapamil.

Precautions: Verapamil should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdosage. Verapamil may decrease neuromuscular transmission in patients with Duchenne's muscular dystrophy and may prolong recovery from the neuromuscular blocking agent vecuronium. It may be necessary to decrease verapamil dosage in patients with attenuated neuromuscular transmission. Combined therapy with beta-adrenergic blockers and verapamil may result in additive negative effects on heart rate, atrioventricular conduction and/or cardiac contractility; there have been reports of excessive bradycardia and AV block, including complete heart block. The risks of such combined therapy may outweigh the benefits. The combination should be used only with caution and close monitoring. Decreased metoprolol and propranolol clearance may occur when either drug is administered concomitantly with verapamil. A variable effect has been seen with combined use of atenolol. Chronic verapamil treatment can increase serum digoxin levels by 50% to 75% during the first week of therapy, which can result in digitalis toxicity. In patients with hepatic cirrhosis, verapamil may reduce total body clearance and extrarenal clearance of digitoxin. The digoxin dose should be reduced when verapamil is given, and the patient carefully monitored. Verapamil will usually have an additive effect in patients receiving blood-pressure-lowering agents. Disopyramide should not be given within 48 hours before or 24 hours after verapamil administration. Concomitant use of flecainide and verapamil may have additive effects on myocardial contractility, AV conduction, and repolarization. Combined verapamil and quinidine therapy in patients with hypertrophic cardiomyopathy should be avoided, since significant hypotension may result. Concomitant use of lithium and verapamil may result in an increased sensitivity to lithium (neurotoxicity), with either no change or an increase in serum lithium levels; however, it may also result in a lowering of serum lithium levels. Patients receiving both drugs must be monitored carefully. Verapamil may increase carbamazepine concentrations during combined use. Rifampin may reduce verapamil bioavailability. Phenobarbital may increase verapamil clearance. Verapamil may increase serum levels of cyclosporin. Verapamil may inhibit the clearance and increase the plasma levels of theophylline. Concomitant use of inhalation anesthetics and calcium antagonists needs careful titration to avoid excessive cardiovascular depression. Verapamil may potentiate the activity of neuromuscular blocking agents (curare-like and depolarizing); dosage reduction may be required. There was no evidence of a carcinogenic potential of verapamil administered to rats for 2 years. A study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. Pregnancy Category C. There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. Verapamil is excreted in breast milk; therefore, nursing should be discontinued during verapamil use.

Adverse Reactions: Constipation (7.3%), dizziness (3.3%), nausea (2.7%), hypotension (2.5%), headache (2.2%), edema (1.9%), CHF, pulmonary edema (1.8%), fatigue (1.7%), dyspnea (1.4%), bradycardia: HR < 50/min (1.4%), AV block: total 1°,2°,3° (1.2%), 2° and 3° (0.8%), rash (1.2%), flushing (0.6%), elevated liver enzymes, reversible non-obstructive paralytic ileus. The following reactions, reported in 1.0% or less of patients, occurred under conditions where a causal relationship is uncertain: angina pectoris, atrioventricular dissociation, chest pain, claudication, myocardial infarction, palpitations, purpura (vasculitis), syncope, diarrhea, dry mouth, gastrointestinal distress, gingival hyperplasia, ecchymosis or bruising, cerebrovascular accident, confusion, equilibrium disorders, insomnia, muscle cramps, paresthesia, psychotic symptoms, shakiness, somnolence, arthralgia and rash, exanthema, hair loss, hyperkeratosis, macules, sweating, urticaria, Stevens-Johnson syndrome, erythema multiforme, blurred vision, gynecomastia, galactorrhea/hyperprolactinemia, increased urination, spotty menstruation, impotence.

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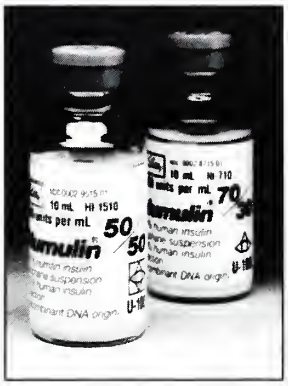

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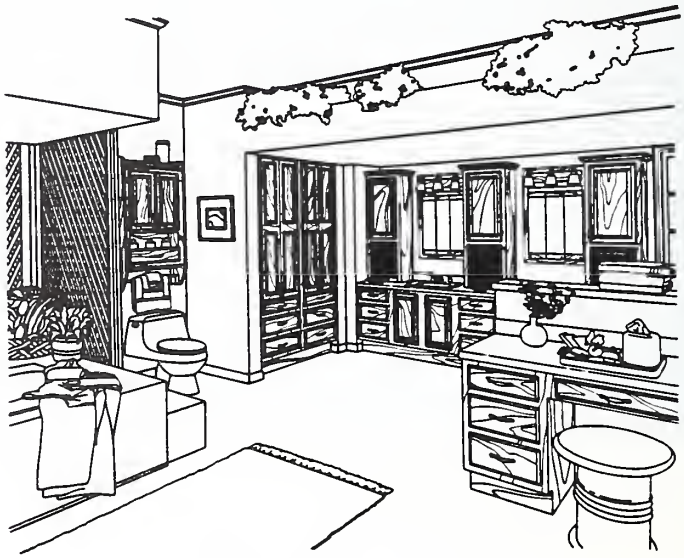

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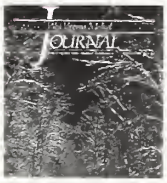


Front Cover

Snow-covered Alpena Gap in Randolph County creates a beautiful winter wonderland. Photo courtesy of *Stephen J. Shaluta Jr.*, West Virginia Division of Tourism and Parks.

Harrison County Medical Society joins with local community to create free clinic in Clarksburg

The Harrison County Medical Society and local residents of the Clarksburg community have truly given area citizens a gift which keeps on giving -- a free clinic called Health Access, Inc.

Since the clinic opened its doors on October 6, the volunteer staff of physicians and nurses have already cared for over 300 patients, and currently there are appointments scheduled through March.

"The need for free health care in our area is so great that we have already expanded our hours from one night a week to two nights a week, and after the start of the year we hope to increase our medical coverage to five nights a week with some daytime hours," Dr. Ortenzio, chairman of Health Access' board of directors said.

"There has been such an outpouring of time, money, and supplies from not just local health care professionals and citizens, but from people all over the state who want to see the clinic succeed," Dr. Ortenzio commented. "Everything for the clinic has been donated including the furniture, computer and telephone systems, medicines, lab and X-ray services, as well as the labor to remodel. Even the space itself was donated by local businessman Lonnie Bonasso. We now have over 50 physicians who volunteer their time on a rotating basis and over 65 lay volunteers including nurses, pharmacists, auxilians, employees from United Hospital Center, social workers, ministers and office managers who work at the clinic, and people continue to offer their help," he added.

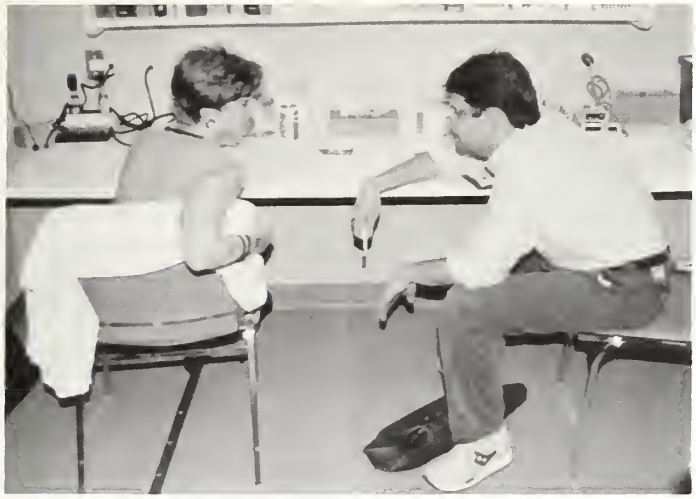
Dr. Ortenzio began spearheading the effort to create the clinic in April 1991 after talking with the director of the Health Right Clinic in Morgantown and finding out how overwhelming the demand had become for free health care. Patients were traveling from as far south as Braxton and Webster counties, and from as far north as Pennsylvania and western Maryland counties to receive care at the Morgantown clinic, so Dr. Ortenzio decided to ask the Harrison County Medical Society if something could be done in Clarksburg.

"As a member of the Harrison County Medical Society, I was very pleased to find that the President Doug McKinney and the other members shared my concerns about the need to help individuals who did not have access to health care because they were uninsured or fell through the cracks of the system," Dr. Ortenzio said. "They donated $25,000 to get the clinic started and have been very supportive in staffing Health Access and caring for patients in their own offices free of charge on a referral basis. In addition, many other health care professionals in the local community such as dentists, physical therapists and podiatrists are seeing our patients free of charge in their offices," he elaborated.

After the initial contribution by the Harrison County Medical Society,

During her first visit to Health Access, patient Judy VanScoy discusses one of her medications with Dr. Alan Romine.

Volunteer pharmacists Don Hutson (left) and Randy Williams fill prescriptions in the clinic's pharmacy.



At the clinic's nursing station, Dr. Louis Ortenzio consults with volunteer Tina Romeo, who is director of medical records at United Hospital Center.

Subhra Datta, past president of the Harrison County Medical Society's Auxiliary, organizes pharmacy orders with volunteer Cathryn Jenkins, a student at Fairmont State College.

$25,000 was donated by the Benedum Foundation; $4,200 was given by the Harrison County Rotary, Clarksburg Rotary and Bridgeport Rotary; and the Meuse-Argonne VFW, Harrison County Lions Club and other area civic, business and professional organizations also have made contributions. The clinic's full-time Executive Director Aaron Taylor recently obtained a primary care grant and is constantly working to secure more grants and donations so the facility can operate on a long-term basis. In addition, in 1993, Health Access, will qualify for $15,000 from United Way of Harrison County.

"We are very fortunate to have such strong support both financially and in volunteer personnel from so many different health care facilities, associations, church groups, businesses and individuals," Taylor said. "For example, United Hospital Center not only donates lab and X-ray services, but automatically codes a patient for charity care if we refer them. Many of the hospital's employees are also an important part of our core group of volunteers who work at the clinic each week to help care for patients, document medical records, process patient financial data, as well as see that CLIA and OSHA regulations are attended to properly. These United Hospital Center employees and our other volunteers have already logged in over 2,900 hours of their time at the clinic," he added.

Health Access is open from Monday through Friday with a clerical staff so potential patients may come in to fill out an application. Individuals must qualify for care under the federal poverty guidelines before an appointment is actually set up. Physicians then see patients two nights a week from 6:30 p.m. - 9 p.m.

The clinic's volunteers all agree that their greatest reward is in the feeling they receive from knowing they have helped others in need. One of these volunteers, Sandy Martin who laughingly calls herself "the #1 volunteer," has not only been helping out at Health Access since before the doors were even open, but was also one of the clinic's first patients.

"Since my husband and I moved to this area, I have not been able to find work," Sandy said. "When I found out they were planning on opening this clinic, I was happy to volunteer my time because I like being busy and assisting others. Since I currently do not have insurance, it turned out that I was eligible to be a patient and I have been very grateful for the treatment I have been given," she commented.

Patient Judy VanScoy is also happy to be a patient at Health Access. "I think this clinic is wonderful and it has been needed for a long time," she said. "My husband is a retired coal miner who is diabetic and has severe breathing problems. "He is not old enough to draw a pension, so we live on his disability and Social Security. I need medicine for high blood pressure and a chemical imbalance I have and I can't afford it. I was so thankful when I was accepted at Health Access and I was told I would receive help obtaining my medicine. Everyone here is so nice," she added.

In order for the clinic to expand its coverage to five days a week as planned, Dr. Ortenzio, Taylor and others involved with Health Access are in the process of raising funds so a medical director, an RN and an office manager can be hired on a full-time basis. Plans are also underway to acquire additional space in the building so the clinic can have room for dentists and social workers.

Members of the clinic's Eligibility Committee review the applications of potential patients to see if they meet the federal poverty guidelines.

Pocket computers in anesthesiology

ROBERT E. JOHNSTONE, M.D.
Professor, Department of Anesthesiology, West Virginia University, Morgantown

Abstract

Pocket computers are a new technology in academic anesthesia practice. These computers are inexpensive, portable, easy to use and can store large amounts of data, but the limited ability to program them and the length of time necessary to enter data can be disadvantages.

Introduction

I am an anesthesiologist who recently returned to academic medicine at West Virginia University after a decade in private practice. I have found new knowledge, techniques and attitudes among students and residents at WVU. To succeed in this multidisciplinary, open and competitive culture, I have had to learn new skills, including uses and limits of modern computers.

Although only 48 years old, I have lived through several technologic eras. In the 10th grade (1959), I prided myself for having a larger slide rule than most students and knowing how to use all the scales with moderate facility. Now, slide rules are found in museums and the knowledge of logarithms, on which most scales are based, is lost. I also learned to write quickly, by omitting vowels and using self-made abbreviations. Quick writing let me record more of my teachers' lectures, and extensive lecture notes particularly helped in courses like history and biology.

In 1977, I returned to a local university to take free business courses through a G.I. bill. I was disappointed to find my skills developed earlier no longer conferred a competitive advantage. Most students brought small tape recorders to class; they recorded the lectures and doodled and oogled while I wrote furiously. Also, students handled the toughest calculations and statistical analyses with facility using portable calculators. It wasn't long before I was the proud owner of a $120 tape recorder and a $150 Hewlett-Packard calculator with special keys for square roots and other common mathematical functions.

I ran busy private practices during the 1980s. I developed a system of pocket notecards to remember appointments and kept photocopies of important graphs and charts at hand to remember drug and equipment data. I trained and depended upon secretaries to remind me of employee birthdates, committee assignments and deadlines. Unfortunately, the value of these skills may also be lessening.

WVU Practice

In August 1991, I joined the faculty of WVU and found a new technology. Several of the residents had pocket computers that stored more information than I could remember. The Anesthesia Department gave each resident $1,200 per year for journals, meetings and educational expenses and several residents had spent some of their money on computer hardware and software. The most innovative and trendy purchases in this area were pocket computers.

Seven of the 15 residents I surveyed owned pocket computers. This was in addition to the one resident who used a wristwatch calculator, one who owned a laptop computer and many who had desktop computers at home. Investigating further, I found the residents used their pocket computers to store drug dosages and telephone numbers, schedule call duties and

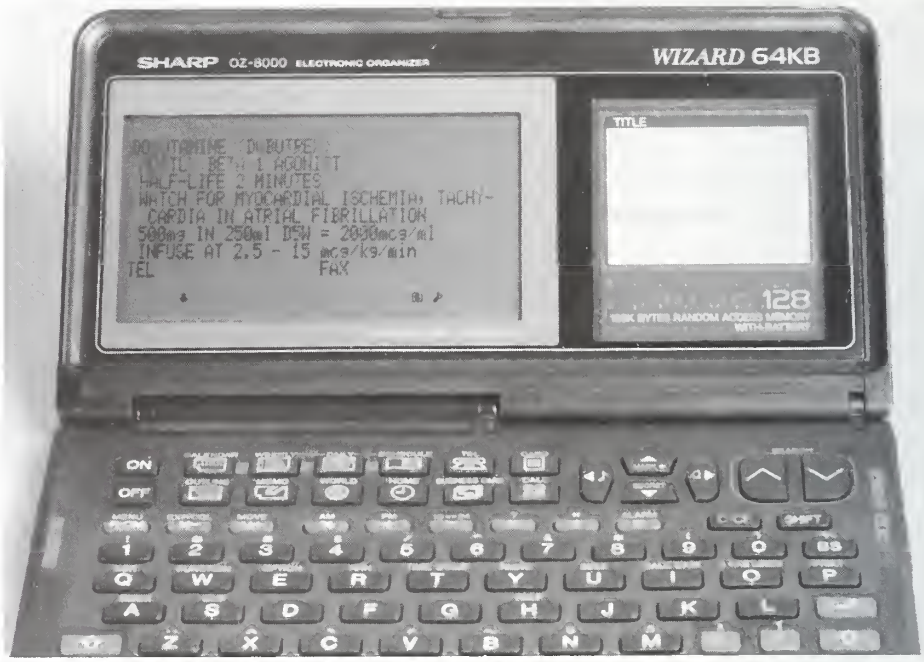


Figure 1. The Sharp pocket computer utilized by Dr. Johnstone.

lectures, log their anesthetics, keep a running checkbook balance, and solve mathematical problems. Some residents kept their computers with them at all times and consulted them frequently. Most residents carried computers with 64 kilobytes of memory. In addition, none of the residents surveyed admitted to playing games on their computer; however, the fact that their newest faculty member did the surveying could have biased the results.

There is no consensus about this technology. One resident thought that pocket computers were "something else to lose." Most wanted computers with more power or functions. Two wanted a spreadsheet so that they could store and sort their anesthetics into different categories. One resident wanted word processing and another wanted programming to enter some cardiovascular formulas he preferred. All these functions are available in portable computers, but either at too expensive a price or too bulky a size for the resident.

My pocket computer

To remain competitive in my new world, I recently surveyed the pocket computer market and purchased a Sharp OZ-8000 (Figure 1). This is marketed as a personal electronic organizer and seemed to have the best capabilities for me. I paid $300 for this computer which fits into a scrub shirt pocket and has 192 kilobytes of memory. This amount of memory allows storage of more than 2,000 telephone numbers and drug dosages, as well as nearly unlimited calendar functions. My computer measures approximately 3 3/4 x 7 3/4 inches. A new Hewlett-Packard pocket computer has 512 kilobytes of memory and comes with a Lotus spreadsheet, but costs more and is more complicated than I wanted. The smaller Texas Instruments models had a maximum of 64 kilobytes of memory, which I feared was too limiting. I have also seen articles touting small computers to be introduced soon with memories sufficient to store several textbooks. However, I wanted a computer then and decided not to wait for the inevitable improved versions.

So far, I have used my computer to store phone numbers, addresses, medical information and personal data, and to schedule my appointments and calls. The calendar scheduling function seems particularly well organized and, for instance, entering a birthday or anniversary automatically marks this day of the year in all future years. Transferring from months to weeks to hours of the day for scheduling is easy. There is a secret file which is entered only with a password and I have stored credit card numbers and lock combinations here. Finally, I have been entering important, as well as routine, pharmacological information in data files. This drug information is necessary for modern anesthetic practice and especially in an academic setting. The primary problem with my new computer has been the time and effort it takes to enter the information. Also, the memo functions don't alphabetize, so I had to adapt a second telephone file for drug information; and I find that some of the "gee-whiz" functions, like the current time in Bujumbura, Burundi, get in my way.

Only with experience will I know the usefulness of this new technology. However, I am sure the current pocket computers are only a phase and something will replace them. In the future, we may carry an electronic gadget the size of a pen into which we speak to access worldwide databases and which displays back to us a video of everything we need to know about anything. Or maybe anesthesia will be obsolete and I won't have to worry about any facts.

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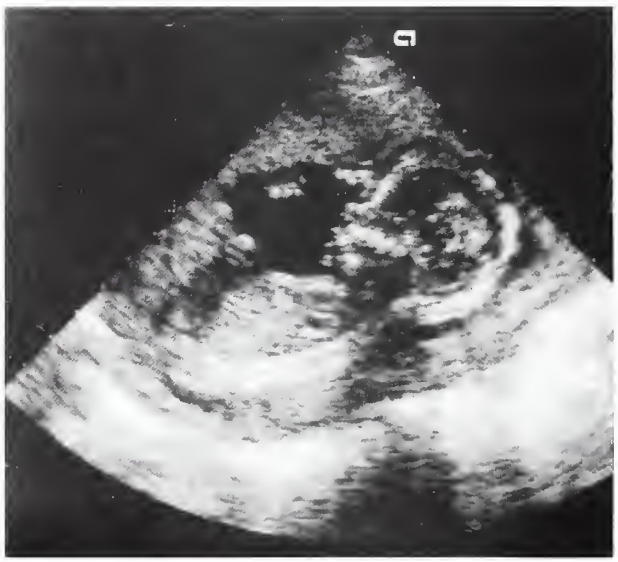

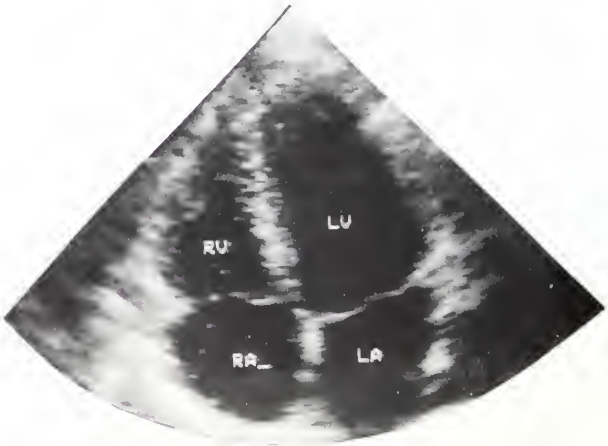

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Chlamydia trachomatis antigen prevalence among pregnant women in West Virginia

DOUGLAS D. GLOVER, M.D.
Professor of Obstetrics and Gynecology, West Virginia University School of Medicine, and Associate Professor of Clinical Pharmacy, West Virginia University School of Pharmacy, Morgantown

HOWARD GORDON, M.D.
Professor and Chair of the Department of Obstetrics and Gynecology, West Virginia University School of Medicine, Charleston Division

GREG MOORE, B.S.
Disease Consultant, Bureau of Veneral Disease Control, West Virginia Bureau of Public Health, Charleston

BRYAN LARSEN, Ph.D.
Professor of Obstetrics and Gynecology and Professor of Microbiology, Marshall University School of Medicine, Huntington

Abstract

During 1990, more than 2,100 women who received prenatal care at one of four clinics which serve 11 West Virginia counties, were screened for chlamydial antigen. Overall, 5.6 percent of the women screened had positive antigen tests and 90 percent of these individuals were under the age of 25. The prevalence of chlamydia was different at three geographic sites with the highest rate of positive antigen test being 9.4 percent at one site. These findings led to a careful analysis of the prevalence of this disease among women who lived in rural areas versus those who lived in urban areas. This detailed analysis involved only patients seen in the Grafton and Morgantown clinics, and revealed a tendency for most positive antigen tests to occur among women with urban addresses. Our study indicates that a substantial chlamydial problem exists among pregnant women of young age. Although screening all pregnant women for chlamydia may not be cost effective, knowing which individuals are at highest risk may help target limited screening for these patients.

Introduction

Genital tract infection with *Chlamydia trachomatis* represents a major public health problem, and indeed is considered to be the most common of the sexually transmitted bacterial diseases (1). Numerous prevalence surveys have been done in the United States and around the world, but the literature has limited utility for physicians in West Virginia since the vast majority of published studies have been conducted in large urban areas, have concentrated on individuals attending sexually transmitted disease clinics, and very few have been directed at the problem in pregnant women.

Since *Chalamydia trachomatis* may be the cause of ocular infection or pneumonitis in the newborn infant, the obstetrician/gynecologist has a special concern for pregnant women who become infected with this organism. A previous survey of the prevalence of chlamydial infection in this state revealed that among a small cohort of pregnant women cared for in one clinic, almost 10 percent were infected (2). It was not apparent whether this prevalence was limited to that clinic or whether this rate of infection occurred statewide. The present study was undertaken to assess the rate of chlamydial disease among pregnant women in West Virginia and to judge whether the prevalence is similar to that reported in other parts of the United States. In addition, the present prevalence survey was conducted to determine if a change in the number of cases may had occurred since the previous investigaton (2).

Methods

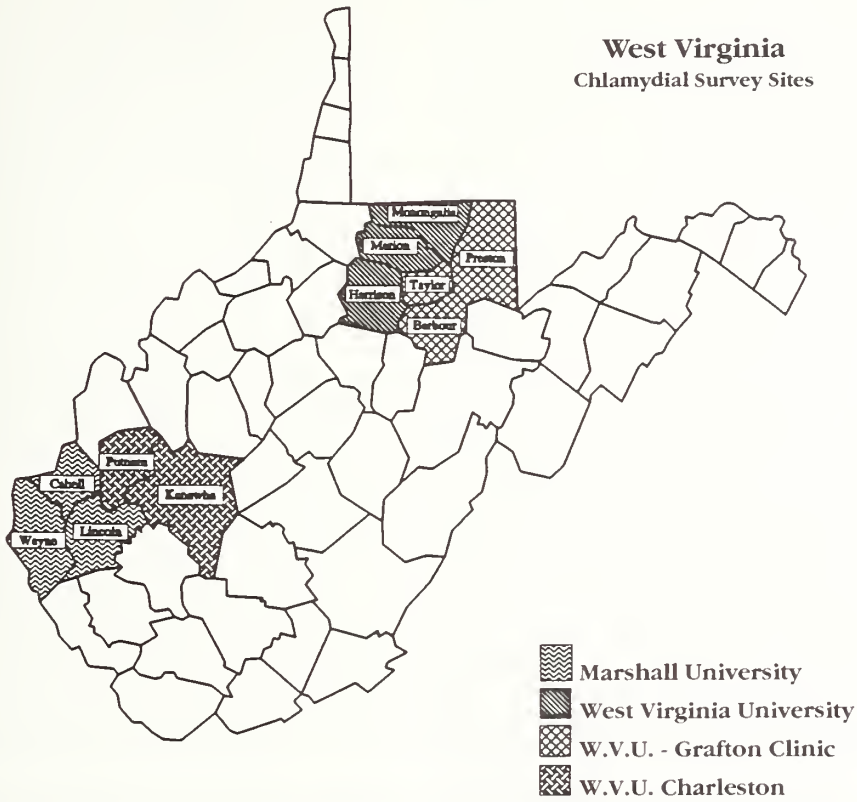
Patient samples were collected in clinics in four geographical areas of the state. These clinic sites and the counties they serve are noted in Figure 1. The clinics included WVU Medical Center (Morgantown); WVU Grafton Outreach Clinic; WVU, Charleston Division; and Marshall University (Cabell-Huntington Hospital Prenatal Clinic). Several demographic characteristics of the counties served are also noted in Figure 1, including location, population of the various counties served and indicators of income, and the prevalence of poverty.

The clinics identified in Figure 1 obtained the vast majority of their patients from the counties indicated, however, a minority of patients from locations outside these counties were included among the clients of these four clinics. For the purpose of this analysis, women who were residents of Pennsylvania and Maryland were excluded from the data obtained at the WVU Medical Center in Morgantown and the Grafton Clinic. Kanawha County had the highest per capita income and the largest population, but 15 percent of its population was receiving public assistance. The lowest per capita income and higest rate of public assistance was in Lincoln County in the area served by the Cabell-Huntington Hospital Prenatal Clinic. All centers located in urban areas were in all smaller cities including Charleston (1990 census - 57,287), Clarksburg (18,059), Fairmont (20,210), Huntington (54,844) and Morgantown (25,879).

The patients evaluated for the presence of chlamydial antigen were all individuals presenting for prenatal care at one of the four locations indicated, and were not selected on the basis of any known risk factors. Test materials were obtained and processed using commercially available test kit materials (Abbott Laboratories, North Chicago, Ill.), which included swabs for specimen collection.

Patient samples for chlamydia screening were obtained during speculum examination by rotating the swab provided in the test kit in the cervical os. Samples were obtained at the earliest prenatal visit, although the gestational age at the first visit varied

FIGURE 1. Demographic Characteristics of Chlamydial Survey Sites.



Service Area Characteristics

County	1990 Est. Population	1988 Per Capita Income	1988 Est. Poverty Population	Percent on Public Assistance
Kanawha	207,619	$14,400	27,963	15.06
Putnam	42,832	$12,162	4,542	10.63
Cabell	96,832	$13,497	14,097	15.95
Wayne	14,636	$ 9,791	9,225	19.56
Lincoln	21,382	$ 8,015	8,015	32.55
Taylor	15,144	$ 9,136	2,626	21.79
Barbour	15,699	$ 9,192	3,623	25.25
Preston	29,037	$ 9,060	6,505	19.16
Monongalia	75,509	$12,610	11,481	9.94
Marion	57,249	$11,625	9,211	17.25
Harrison	69,371	$12,394	11,895	18.09

among patients. Screening was done regardless of the presence or absence of clinical symptoms. Swabs were returned to the transport tube and sent to the State Hygienic Laboratory where the ELISA test (Chlamydiazyme®) was completed according to the manufacurer's directions. Results of screening were returned to the physician who took the sample, which allowed antigen positive patients to receive appropriate therapy.

Results

During the period of this study, 2,122 pregnant women were screened for the presence of chlamydial antigen. Of these women, 120 or 5.6 percent tested positive. Although no consistent attempt was made to report the length of gestation at the time the cultures were taken, the WVU Medical Center obtained chlamydia antigen tests as early as seven weeks and as late as 35 weeks gestation. Of the 22 antigen positive cases from the WVU (Morgantown and Grafton) clinics, 13 (60 percent) were identified during or prior to the 20th gestational week.

Young age is commonly cited as a risk factor in identifying individuals likely to be infected with chlamydia. The data from all reporting sites in the state are consistent with this concept as shown by Table 1. Only 10 percent of the women who tested positive for chlamydial antigen were 25 years of age or older, although women ages 25 or older constituted 32 percent of all women screened for chlamydia.

This evaluation also revealed different levels of chlamydial antigen prevalence at the various reporting sites (Table 2). The lowest rate was found at the WVU (Morgantown and Grafton) sites which had populations with one third the observed prevalence of that in the Huntington area. This finding raised the question of whether living in an urban area was associated with a higher prevalence of chalmydia antigen. The Grafton Clinic served Barbour, Taylor, and Preston counties, a population which was very rural, whereas the majority of patients seen at the WVU (Morgantown) Clinic were from the cities of Morgantown, Fairmont and Clarksburg.

A more careful analysis of the patients seen at the Morgantown and Grafton sites was undertaken and the results are presented in Table 3. Positive antigen tests were obtained from 22 of 736 women, however, 74 percent of the patients who tested positive resided in the cities of Morgantown or Fairmont. All women who tested positive had their charts anotated with current addresses. This revealed that of all positive cases derived from the Morgantown and Grafton clinics, only one woman from the Grafton Clinic tested positive and she was a transient, who recently moved from a metropolitan center outside West Virginia.

Discussion

Chlamydia trachomatis is an etiologic agent of particular interest to the obstetrician and perinatologist because both maternal and fetal complications are associated with this obligate intracellular parasite. Unfortunately, prenatal screening is

TABLE 1. Age Distribution of Chlamydia-Positive Patients At All Study Sites			
Age Group (years)	Chlamydia Positive	Number of Patients Screened	Percent of Patients Positive
10-14	2	18	11.1
15-19	61	610	10.0
20-24	45	806	5.5
25-30	7	456	1.5
31-34	4	122	3.2
35-39	0	61	0
40-45	1	12	8.3
Unknown	0	37	0
Total	120	2122	5.6

TABLE 2. Chlamydia Prevalence at Various State Reporting Sites		
Site	Number Screened	% Chlamydia
Marshall University	277	9.4
WVU-Charleston Division	1109	6.6
WVU Health Sciences Center	736	2.8

TABLE 3. Comparison of Chlamydia Positive Rate in Two West Virginia Clinics				
Location	Prevalence (%)	Number of Patients Screened	Mean Age Of Chlamydia + Patients	Mean Age Of All Patients
Morgantown	3.1	669	22.6	24.2
Grafton	1.4	67	16	22.2

not a simple matter. The most reliable method of identifying infected individuals is by means of culture, but culture requires inoculating living cell lines, a method which is costly and not available in all laboratories. Immunologic tests have provided an alternative which obviate the need for cell cultures, but are considered to be less accurate and sometimes are as technically demanding as cell culture methods. Immunologic tests cannot be used for test of cure since antigens may still be present after the infecting organisms have been killed. Furthermore, the optimal time for patient evaluation has not been established regardless of the test used for screening.

Despite these limitations, the availability of chlamydia immunoassay test kits (Chlamydiazyme®, Abbott, North Chicago, Ill.) prompted this prevalence survey. We were particularly interested in the prevalence of chlamydia among pregnant women in West Virginia because of our belief that studies previously reported in the literature are not necessarily relevant to the West Virginia population. West Virginia is a rural state and only two cities have populations greater than 50,000. Poverty is prevalent and access to health care has often been limited due to transportation problems and a limited number of obstetric care providers. In addition, an earlier evaluation involving a small number of pregnant women in southern West Virginia indicated that the prevalence of *Chlamydia trachomatis* may approch 10 percent (2).

The literature available on chlamydial infection in pregnancy reveals the prevalence based on culture in urban centers to be between 2 percent in Boston (3) and 22 percent in New Orleans (4). In addition, results from a large screening program in San Francisco showed a 5 percent prevalence rate (5). A 9 percent prevalence rate was observed in Denver (6) and a 12 percent - 13 percent rate in Seattle (7,8).

Less information is available on the prevalence of chlamydial infection among rural populations. A study done among native Americans in New Mexico found a prevalence of 26 percent (9), and a more recent screening of 184 native American women in Arizona yielded a 24 percent rate of infection. Although the results of the present study were not obtained by culture methods, they do provide an estimate of chlamydial prevalence which portrays an infection rate in the lower range of the rates observed in urban areas in the United States. The prevalence varied among clinics within the state, but interestingly the Cabell-Huntington Prenatal Clinic revealed an infection rate among its clients which was virtually identical to that reported for the same clinic previously (2). The two clinics in the northern part of the state (Morgantown and Grafton) had a lower prevalence of infection than the clinics in the southern part of the state, which elicited the question of whether prevalence differed among populations who reside in urban versus rural areas. The evaluation of patients' addresses did not represent a statistically rigorous evaluation, but did suggest that in our population, the majority of cases were identified among women who lived in urban areas. Notably, a study comparing family planning clinic patients from rural and urban areas in Pennsylvania has recently been reported by Winter and colleagues (10), who failed to discern a difference in prevalence between urban and rural clinics as determined by Chlamydiazyme® testing. More recently, Root and colleagues found a 4.7 percent culture positive rate for chlamydia among 530 rural women in Michigan's upper peninsula (11).

Undoubtedly, different rates of infection in the various clinics sampled results from characteristics of the population and their sexual and social behaviors rather than geography. One presumed correlate cited in the literature is a propensity for poverty to be associated with chlamydial cervicitis (12). Our survey does not support that concept in West Virginia. Those counties with the greatest proportion of families living below the poverty line did not have the highest prevalence of chlamydial infection (Figure 1).

As noted before, antigen testing for chlamydia, although useful, is not 100 percent specific or sensitive. As a consequence, this test will tend to overestimate prevalence in low prevalence populations as noted elsewhere (2). Increased accuracy can be achieved when using the Chlamydiazyme® test by retesting positive specimens in the presence of a chlamydia-specific blocking

antibody which permits the identification of false positive tests. In low prevalence populations, such as those encountered in West Virginia, such a technique could improve the reliability of ELISA testing.

Populations such as those in West Virginia provide no easy answers in terms of screening. Screening all pregnant women is undoubtedly beyond the resources available in this state; however, if between one in 10 to one in 30 women are infected but lack symptoms (note that the women enrolled in the present study presented for prenatal care and did not attend these clinics because of symptoms or for purposes of contact tracing), between 790 and 2,360 pregnant women in the state are likely to be infected each year based on the 23,638 deliveries in the state in 1990. Harrison and Alexander (13) summarize the results of several studies by noting that attack rate for chlamydial ocular infection among babies born to chlamydia positive mother range from 18 percent - 50 percent, for pneumonitis 11 percent - 20 percent, and for positive neonatal colonization as high as 70 percent. Thus, even in a low prevalence state such as West Virginia, a significant number of babies are at risk.

In a state with scarce resources, it is appropriate to consider screening women who fall into the highest risk categories. In addition to the concern for the pregnant women under the age of 25, clinics serving primarily urban areas in West Virginia should consider risk correlates derived from other studies to utilize screening most effectively.

Acknowledgement

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Medical Grand Rounds

West Virginia University Health Sciences Center

Edited by Irma H. Ullrich, M.D., Professor of Medicine, Section of Endocrinology and Metabolism

Heart disease in women

DISCUSSANTS:

IRMA H. ULLRICH, M.D.
Professor of Medicine, Section of Endocrinology/Metabolism, West Virginia University

RACHEL A. YEATER, Ph.D.
Professor of Physical Education and Exercise Physiology, West Virginia University

JYOTSNA DALAL, M.D.
Fellow in Invasive Cardiology, Johns Hopkins School of Medicine, Baltimore, Md.

Abstract

Heart disease is a significant problem in women. Age, smoking, and hyperlipidemia are potent risk factors, as is the presence of diabetes. Hypertension is less of a risk factor in women than men.

Diagnosis of coronary artery disease is most difficult in women, especially using non-invasive techniques, because of a lower prevalence of disease.

Thrombolytic therapy may be associated with more bleeding in older, smaller women. Angioplasty and surgical bypass may be more difficult because of smaller coronary artery size in women.

Exercise, aspirin, and estrogens appear to decrease the incidence and mortality of heart disease in women, but concern has been raised that the use of resources for the study, prevention and treatment of heart disease has a gender bias, with men receiving more than their fair share.

Introduction

Coronary heart disease is the leading cause of death in both men and women in the United States. Although women enjoy some protection against ischemic heart disease, over age 70, the gender difference is much less prominent. In younger age groups, the ratio of death from heart disease between men and women is three-four to one. In those in the older age groups, this ratio is much less; men however, die at a higher rate at all ages.

In women over the age of 50, coronary heart disease accounts for 250,000 deaths per year in the United States. This represents 28 percent of all deaths in women.

Risk factors (1)

Age is an important risk factor for heart disease in both genders. Men have the greatest increase in heart disease in their 40s and 50s, while the increase is about 10 years later in women. The reason for this gender-related delay has been postulated to be due in some way to the onset of menopause in women. Other investigators, however, have suggested that risk is not increased greatly at menopause, but increases gradually with age.

Cigarette smoking

Cigarette smoking is associated with increased cardiovascular disease in women of all ages. In young smoking women who also use oral contraceptives, the rate of heart disease was increased two and a half times. If they were also hypertensive, the relative risk of having a heart attack was increased 170 times the risk of those women who had none of these factors. In women who are less than 50 years of age, 65 percent of the risk of having a heart attack has been accounted for by smoking alone. The more cigarettes smoked each day, the worse the risk.

The importance of many risk factors for heart disease decreases with age. This is likely due to the fact that those most involved have died, and the effect of age overrides the others. The influence of smoking, however, continues into old age. In a study by LaCroix (2) of over 7,000 persons over age 65, there was about a two-fold increased rate of total mortality in both men and women smokers compared to non-smokers. The rate of death due to cardiovascular disease was increased two times in men and 1.6 times in women who smoked.

Smoking has many deleterious effects in women, such as the lower level of HDL cholesterol it causes. This may be related to its effect of increasing androgens and decreasing estrogens (3). Smokers are also thinner, but have an increase in abdominal fat which is also a known risk factor. In addition, smokers have earlier menopause compared to non-smokers, platelet aggregability and fibrinogen level are increased, and hemoglobin is higher in smokers.

There appears to be no increase in heart disease risk in ex-smokers, even in those over age 65. This fact suggests that the risk of smoking is primarily due to increased tendency of thrombosis rather than increased atherosclerotic disease.

Hypertension

Both black and white women have less hypertension than either black or white men under age 65. The prevalence over age 65 is greater in black women; white women over age 65 have more hypertension than white men at a similar age.

Although hypertension is a risk factor for heart disease in women, it appears to be better tolerated in women than in men. At the same blood pressure level, the risk of heart disease and cerebro-vascular disease is greater in men than women.

Both systolic and diastolic hypertension are important influences with systolic blood pressure having a greater risk. In one study among those over age 65, women were more likely (22.8 percent) than men (14.4 percent) to have isolated systolic hypertension.

The influence of blood pressure treatment on risk of heart disease

varies according to gender and race. In the Hypertension Detection and Follow-Up Program (4), white women who were treated had a worse outcome.

The Systolic Hypertension in The Elderly Program (SHEP) (5) studied 4,736 persons over age 60 (57 percent were women) in a double-blind, placebo-controlled trial. Medication in step 1 was chlorthalidone, step 2 was atenolol. Over a 4.5 year follow-up period, strokes were decreased by 36 percent, coronary artery disease and myocardial infarction were each decreased by 27 percent; and all cause mortality was 13 percent less in the treated group. These benefits were seen in both men and women.

Lipids

Among the various lipid fractions, most studies have found the level of HDL cholesterol to be an important predictor of heart disease in women. The Framingham Study has also shown that LDL cholesterol and triglycerides are also risk factors for women.

It has been suggested that about 50 percent of the reduction of heart disease noted with estrogen therapy given to postmenopausal women is due to change in lipid level (6). Menopause is associated wuth higher levels of LDL cholesterol and triglycerides but lower HDL levels (7). Estrogen therapy results in decreased LDL and increased HDL. The addition of a progestogen may lessen the increase in HDL.

Most studies have found an increase in heart disease risk after early menopause, either surgically or naturally occurring. Simple hysterectomy without oophorectomy may also be associated with early menopause, perhaps due to impaired ovarian blood supply or other unknown mechanisms.

Diabetes

Unlike the other risk factors, the influence of diabetes on coronary heart disease is actually stronger in women than men. The Nurses' Health Study (8) has shown that women with diabetes have a three-fold relative risk of death from heart disease compared to non-diabetic women.

A similar study of white, upper-middle-class residents of Rancho Bernardo (a community in California), included a 14-year follow-up (9). The effect of diabetes was independent of age, cholesterol level, obesity, systolic blood pressure and smoking status, but was exacerbated by their presence.

Obesity

The importance of obesity as a risk factor for heart disease has been debated for many years. Some investigators have found that obesity carries no additional risk beyond that due to abnormal blood pressure, lipids, diabetes and other known risk factors.

Distribution of fat may play a more important role than total adiposity with android (abdominal) obesity being more atherogenic than gynoid (hips and thighs) obesity. Android obesity is more likely to be associated with insulin resistance, hypertension and low HDL cholesterol.

Fluctuations in weight due to dieting and regain were found to be associated with increased heart disease risk in the Framington population (10). Large weight fluctuations, up to 18 percent in men and 21 percent in women, were associated with increased total and cardiovascular mortality which was independent of degree of obesity in both men and women. This study is difficult to interpret because there is no information about the diets of these people during weight regain.

Family history

Parental (both maternal and paternal) heart attack prior to age 61 was associated with a 2.8 increased relative risk of heart attack disease in women (1). Parental heart disease over age 61 had a smaller or negligible increased risk.

Although it appears that a positive family history of heart disease is an independent risk factor, one should also remember that other risk factors such as hyperlipidemia, hypertension and diabetes are also inherited, which may explain part of the familial clustering of heart disease.

Exercise

There are few long-term studies of the influence of physical fitness on heart disease in women. The studies that have been done on physical activity and heart disease in women are conflicting, with about 50 percent showing no advantage in the active group. However, the questionnaires used in these studies were developed and validated with male subjects; therefore, activities related to child care and household work were not included. If these questionnaires caused more misclassification of women on physical activity than men, the studies would be more likely to show no association.

An excellent study was conducted by Blair (11) on 3,000 women over a period of eight years to measure physical fitness by a maximal treadmill exercise test. He found that age-adjusted, all-cause mortality rates declined across physical fitness quintiles from 39.5 per 10,000 person years in the least fit women, to 8.5 per 10,000 person years in the most fit women. Although this study looked at all-cause mortality, cause-specific death rates by fitness categories were also examined. Both cardiovascular disease and cancer showed a strong gradient across fitness groups, while none was seen for other causes of death.

To make the results of this study clinically useful, Blair also calculated results by metabolic equivalents (MET) and maximal oxygen uptake values. One MET is equal to a resting oxygen consumption of 3.5 ml/Kg/min. His data indicated that the optimal fitness level for women was 9 METs (31.5 ml/Kg/min). Fortunately, for most women, this level of fitness can be attained through moderate exercise consisting of a brisk walk of 30 to 60 minutes each day. This moderate exercise program could have a major impact on death rates among women. Data from this study indicate that if all unfit women become fit, a 15.3 percent reduction in death rates for women might be expected.

The protective effects of a higher level of physical fitness are produced by physiologic mechanisms, some of which are well known and others which at this time can only be postulated. The preponderance of literature supports the positive relationship of physical activity to reduced blood pressure and improved lipid profiles. Other mechanisms can only be theorized. Animal studies have shown less extensive atherogenic changes in exercising animals and increased coronary collateral circulation. Exercise resulted in increased thresholds for ventricular fibrillation in isolated rat hearts, which might allow the trained animal to have

better survival due to an increased tolerance of arrhythmias or less chance of developing dangerous arrhythmias during an acute ischemic event.

Studies conducted on male patients with coronary heart disease have shown that the myocardial oxygen supply is enhanced with intense training. Other studies using middle-aged men as subjects have shown that exercise lowers the aggregability of platelets. Although such studies have not been conducted on women, it can be postulated that these mechanisms might be responsible for the positive effects of exercise on females as well.

Other factors

Personality type may also influence development of heart disease. Women who were type A were found in the Framingham Study to be at increased risk irrespective of whether they worked outside the home or were homemakers. Level of education is inversely related to heart disease in women as well as men.

The influence of stress may also be important as women assume more executive positions. A survey of 1,000 women in influential executive positions (12) suggested that this need not adversely influence health. These women were more likely to be of normal weight, ex-smokers or non-smokers with normal blood pressures. About 50 percent exercised three or more times per week, with only 13 percent having little regular physical activity.

Myocardial infarction

Heart attack in most cases presents in a typical fashion in both women and men; an atypical presentation is more common in women. This has been postulated to be due not to gender but age, with women being about 10 years older at presentation.

Location and size of infarction are similar in women and men. Women have more non-Q wave infarctions, but are more likely to have recurrent infarctions. In the Framington Study (13), about 38 percent of women had unrecognized infarctions compared to 28 percent in men. There is a longer delay in seeking medical attention after the onset of symptoms in women compared to men. This is of importance because the success of some modalities such as thrombolytic therapy decreases with delay.

Diagnosis

The diagnosis of heart disease by some non-invasive methods is not as reliable in women compared to men because of a lower prevalence of disease in women.

Evaluation of any male or female patient who presents with chest discomfort resembling angina, begins with history, physical examination and resting electrocardiogram. Exercise stress testing (EST) remains a commonly used tool for the evaluation of cardiac status. In men, the validity of the criteria for positive EST has been established in clinical studies on patients by following studies in normal populations and by correlation with coronary arteriography. Such validation is not available in women.

As early as 1950, Scherlis and colleagues (14) noted that compared to men, normal women were more likely to have ST Segment depression after exercise. Since then, several studies have pointed out that a high false positive rate of ST segment changes is associated with female gender (15,16).

All these studies also revealed that the prevalence of coronary artery disease (CAD) was lower in women compared to men. Predictive accuracy of a given test depends on the prevalence of the disease in that population (17). It is likely that the lower accuracy of EST in women is due to the lower prevalence of CAD in women. Recently retrospective studies (18,19) have suggested that the estrogen status of a woman may be associated with the accuracy of EST results. The role of exercise testing in the diagnosis of CAD in women remains unclear.

Accuracy of exercise testing with and without thallium has been studied in women (20,21). The sensitivity and the specificity of thallium imaging was comparable in men and women.

Pharmacologic stress (with dipyridamole adenosine, dobutamine) is used in patients who cannot exercise (stroke victims, hip fracture patients, etc.). Comparative studies between male and female gender are lacking in this field.

Little information is available about the influence of gender on coronary arteriography except that females tend to have smaller coronary arteries. Nevertheless, coronary angiography remains the "gold standard" for coronary artery disease in both genders.

Thallium stress tests are similarly correct in men and women. Little information is available about the influence of gender on dipyridamole testing.

Prevention trials

The primary prevention trials of low-dose aspirin included only men. Secondary trials of antiplatelet (ASA) therapy have frequently included a few or no women. The ISIS II Study (22), however, showed a 20 percent improvement in rate of death/ infarction in women as well as men.

A prospective observational study of aspirin use and cardiovascular disease was recently reported (23). This was a study of 87,000 female registered nurses who were 34-65 years old at baseline. At follow-up six years later, the numbers of heart attacks and strokes were assessed. Those who took one to six aspirins weekly had less risk of myocardial infarction independent of other risk factors. There was no difference in the stroke rate. Among those who took seven or more aspirins per week there was no improvement. This was not a true primary prevention trial, but only a questionnaire study. Subjects were not advised to take aspirin or placebo, but took aspirin primarily for headache and musculoskeletal problems.

The influence of estrogen therapy on the prevention of death due to heart disease has been shown in several studies including the Nurses Health Study (24), a 10-year follow-up study which is the most recently published. This study followed 48,470 post-menopausal women. Current estrogen use was associated with a 50 percent decrease in major and fatal coronary artery disease; no change in the relative risk of stroke was found. This also was not a controlled trial.

Therapy

The therapeutic options for coronary artery disease include thrombolytic therapy, coronary angioplasty and surgical bypass.

The use of thrombolytic therapy is based on the assumption that acute thrombosis is responsible for acute infarction. Multiple studies using streptokinase or urokinase have shown similar reperfusion rates in men and women. Reduction in mortality may be somewhat less in women. Female gender, as well as age and size, may be significant risk

factors for bleeding complications. The incidence of major bleeding after angiograms in women over age 65 reached 43 percent in one series. Modification of the dose of the thrombolytic agent may improve this, but more studies are appropriate.

Initial results of percutaneous transcoronary angioplasty (PTCA) were much worse in women than in men, with a lower success rate and more complications. This had been attributed to smaller coronary artery size in women. Since catheters have been modified, results are similar in men and women.

The major studies of surgical coronary revascularization such as CASS and the VA Study have included only men. Women have been found, however, to have a higher surgical mortality, lower graft patency, and a lower incidence of complete revascularization. This may be due in large part to older age, more hypertension and diabetes, and a smaller body and coronary artery size. Despite these factors, the long-term mortality rate is similar tn women and men.

Another view of why women do more poorly with interventional procedures has been suggested by Tobin and co-workers (25). These investigators followed 253 male and 137 female consecutive patients seen from 1982-1983 after nuclear medicine studies for chest pain.

The patients were evaluated by a project cardiologist and the referring physician returned a response card indicating plans for management. About 30 percent of the presenting symptoms in women were attributed to somatic or psychiatric problems, compared to only 14 percent of men.

Of concern is what happened after the results of the scans were available. In 12 percent of men with abnormal exercise thallium scans or wall motion studies, the symptoms were attributed to somatic or psychiatric problems. In women with similar documented abnormalities, 27 percent had their symptoms attributed to problems other than heart disease. Thirty-three percent of these men and none of the women were referred for cardiac catheterization, despite similar nuclide studies.

Interestingly though, more women were receiving cardiac drugs, suggesting that the referring doctor believed they had heart disease. This study, if confirmed, suggests there is a gender bias in considering bypass surgery or other invasive procedures, at least at the time and in the region studied. Usually the decision to perform catheterization is predicated on the plan for further therapy if disease is found. Therefore, if women are not studied by angiography, the likelihood is that they will either not be referred for surgery or the surgery will be done later. Later procedures may be associated with more disease and a poorer outcome (26).

There has been concern about the presence of a selection bias in the use of thrombolytic therapy as well. In enrollment into the SAVE Study (Survival and Ventricular Enlargement) (27), a study of the effectiveness of captopril, the subjects' characteristics and preceding use of thrombolytic agents were assessed.

Subjects who did not receive thrombolytic therapy were more likely to be older, unemployed, less educated, and widowed. Women received thrombolytic therapy less often, but this was due primarily to their older age.

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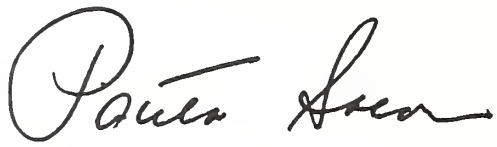
President's Page



Confluence equals leadership

So many auxilians have leadership capabilities but many are unaware that they possess these qualities or they just don't know how to put them to use.

How do you become a leader? CONFLUENCE. I can't impress upon our members enough how much you can gain from attending one of the American Medical Association Auxiliary's Confluences. Both Confluence I and II are dedicated to training state and county officers to become ambitious, confident leaders. By attending the Confluences, auxilians from across the country are able to meet and build valuable relationships. The speakers and break-out sessions are outstanding. The information you obtain in three days is overwhelming, but so very vital. Many seminars or workshops provide you with ideas and information and that's it, but Confluence goes beyond that. It actually teaches you how to implement specific programs and ideas.

During Confluence I this fall, I, along with Winnie Martin, our state executive secretary; Lena Abalos, Parkersburg president-elect; Ida Rago, Mercer County president-elect; and Terry Rojas, Raleigh County president-elect; attended sessions on strategies for communicating, motivational techniques, leadership styles and image, approaches to effective public speaking, publicity opportunities, as well as a number of workshops on topics such as family violence, teen sexuality and AIDS, parenting, medical marriages, drug abuse, and women's health issues.

In addition, there was an AMAA idea fair, which provided an abundance of new ideas for participants to take home, as well as an exhibit area specifically designated for states to display their programs and awards.

Lena Abalos wrote to her fellow members in Parkersburg, "I went to this Confluence with a heart full of eagerness and excitement, and I took home a mind full of information and new ideas." That's exactly how I felt after attending my first Confluence and I've done my best to implement those ideas into programs for the WVSMA Auxiliary.

I wish every officer could attend Confluence. I hope those who will be attending Confluence II from January 31-February 2, will come home with as much enthusiasm and eagerness to be leaders as Lena, Ida, Terry, and I did.

The knowledge you gain is powerful and gives you a great sense of accomplishment. Most of all, though, it allows you to build friendships that last a lifetime.

Pacita Salon
President, WVSMA Auxiliary

Health care employment

We recently spotted an interesting piece buried on an inside page of the Saturday edition of the *Wheeling Intelligencer* -- HEALTH BIG EMPLOYER IN W.VA. is the lead.

In West Virginia, over 60,000 people are employed in health industries the story relates. Health industries are noted to include hospitals, nursing and personal care homes, and "other health services."

The total number of employed persons in West Virginia during the period of this study was 640,000. Government was the leading employer with 125,000 on the payroll. Private sector employment numbered 514,000.

Neither statistics nor mathematics are our forte, but it appears to us that about 11.7 percent of private sector employment is in the "health industries" or, if you like, 9.4 percent of West Virginia's total employment is in the medical care field.

The figures were released by the West Virginia "Bureau of Employment Program." While we do not have access to the raw data, we have certain doubts that the 60,000 listed in the health industries is a full accounting of all those in the state who earn their living via a predominant or exclusive job focus on health-related affairs. We wonder, for instance, if all those government workers busy regulating, reviewing and inspecting medical care are included among those gaining a living in health care.

It enrages us to find Medicine apologetic and defending itself over the fact that medical care consumes 12 percent of the Gross National Product. With the West Virginia figures cited, how could the GNP figures be otherwise? The 11.7 percent of private sector employed persons can be expected to produce about the same percentage of the GNP. With the demand for medical care services going up, how can the medical care portion of the GNP be expected to do other than go up?

We are aware of no valid statistics on the subject, but repeated estimates place paperwork and administrative costs associated with medical care at, at least, 25 percent.

It would certainly generate a lot of unemployment and health care might no longer rate very highly as a big employer, but if it will make our economists and political mothers stop worrying and fussing over the rising medical care cost portion of the GNP, Medicine is willing to suffer the loss of that entire 25 percent of the workers it supports.

–SDW

Primary care scholarships proposed

Health care reform is the buzzword of the 1990s and everybody has a plan. Most are suspect because they favor the interests of the proposer over others, or in many areas, the interests of the providers and the consumers diverge. Over one issue, however, universal access to medical care, the interests converge and parallel, creating a wonderful opportunity for compromise.

Universal access has two facets, one easy and cheap, one difficult and expensive. The easy one is the provision of primary-care physicians to see these folks. It does no good to have insurance in areas where there is little or no medical care to be obtained.

I would like to propose utilizing a system that was started by my home state of Kentucky over 30 years ago, and as far as I know, is still alive and well.

First, let's do the numbers. There are three West Virginia medical schools with a total enrollment of about 300-400 students, about one third of whom will decide to remain in West Virginia. It costs about $10,000 per year for tuition, and most students start practice with $50,000 or more in debts.

With these factors in mind, I think it would be feasible to establish up to 100 rural West Virginia scholarships per year for medical students, costing up to $10,000 each. In the first year, the cost would be up to $1,000,000, rising to a maximum of $5,000,000. To put this in perspective, $1,000,000 is .0005 percent of the state's budget of over $2 billion. Students accepting the scholarship would sign a pledge to:

A. Establish a primary-care practice (general practice, family practice) in a designated underserved area for one year for each year of assistance.
B. If the student wished to become a specialist, the entire amount of scholarship plus interest at 10 percent per annum would be due and payable as a loan.

Since current seniors would be eligible for the scholarships, dividends from the program could be seen in as little as two years. If there were more than 100 applications the first year, priorities would be established. Seniors, who would be the first in the trenches, would be favored over underclassmen. After that, native West Virginians would be favored over out-of-staters, since the goal is more primary-care physicians, not repayment of a loan. When I was in Kentucky, approximately half of the students practiced in underserved areas and half repaid the loans and became specialists.

If a social good is desirable, a way should exist to restructure the economics to achieve it. One of the inflationary factors in the price of health care is the crushing burden of debt of our medical school graduates. A program like this should make primary care available and affordable.

What is my personal stake in this plan? Zero. I have been out of medical school for 27 years and neither of my two children are pursuing medical careers. In addition, Beckley is not medically underserved. I feel this program is simple, cost-effective, tried and proven, and offers a solution to one of our medical problems at a bargain price, therefore I recommend it be seriously considered in our state.

Wallace D. Johnson, M.D.
Beckley

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At Mid-Winter

WVSMA/WVACP scientific session to explore "Moving Points in Medicine"

This year's First Scientific Session at the Mid-Winter Clinical Conference is being co-sponsored by the West Virginia Chapter of the American College of Physicians and will feature new advances and problems in four areas of patient care. Entitled "Moving Points in Medicine," this session is set for Friday, January 22 at 1:30 p.m. at the Charleston House - Holiday Inn and will be moderated by Robert J. Marshall, M.D., F.A.C.P.

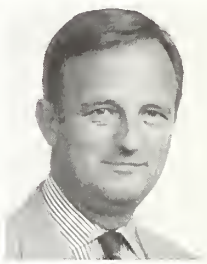
To begin this session, Charles A. Simonton III, M.D., F.A.C.C., of the Sanger Clinic and Carolinas Heart Institute in Charlotte, N.C., will discuss "New Horizons in Interventional Cardiology." Following Dr. Simonton's segment of the program, Robert B. Belshe, M.D., F.A.C.P., professor of medicine and director of the Division of Infectious Diseases at the St. Louis University School of Medicine, will highlight "Current Problems in Infectious Diseases." After a break and the presentation of the Laureate Award, this session will reconvene with Robert M. Graham, M.D., F.R.A.C.P., F.A.C.P., speaking on the subject of "Metabolic and Hemodynamic Aspects of Hypertension Management." The fourth lecture, "Advances in Gastrointestinal Endoscopy," will be given by Peter B. Cotton, M.D., F.R.C.P., professor of medicine and chief of endoscopy at Duke University in Durham, N.C.

Information about these panelists begins below and other details about any of the Mid-Winter Clinical Conference meetings or related seminars can be obtained by contacting Nancie Divvens at 925-0342.

Simonton

Belshe

Graham


Cotton

Panelists highlighted

Dr. Simonton graduated from Harvard University with his medical degree in 1980, and while attending medical school, he held a part-time position as a research assistant in the Division of Cardiology at Peter Bent Bingham Hospital in Boston.

After completing his internship and residency training at the University of California in San Francisco, Dr. Simonton did a two-year fellowship at Duke University and remained another two years to work as an associate in internal medicine in cardiology. He currently is a cardiologist on the staff of the Sanger Clinic in Charlotte and also serves as director of clinical cardiovascular research at the Carolinas Heart Institute. His research interests are in the field of invasive techniques for cardiac diagnosis and therapy, including coronary angioplasty, directed atherectomy, and the application of laser to coronary circulation.

Board certified in internal medicine in cardiology, Dr. Simonton is a fellow of the American College of Cardiology. He has co-authored 15 articles, is the author or co-author of over 20 abstracts, and has lectured extensively on the aggressive management of myocardial infarction, and the application of new and evolving investigational techniques.

Dr. Belshe is a native of Hartford, Conn., who received his medical degree from the University of Illinois College of Medicine, where he also completed an internship and residency. Following his postgraduate studies, Dr. Belshe accepted a position in 1975 at the National Institutes of Health as a research associate in the National Institute of Arthritis and Infectious Diseases.

After three years at the National Institutes of Health, Dr. Belshe joined the Department of Medicine at Marshall University as an associate professor and chief of the Section of Infectious Diseases. He was promoted to professor of medicine in 1983 and also held the position of professor of microbiology. While on the faculty at Marshall, Dr. Belshe spent a year on sabbatical at the National Institute for Medical Research in London.

In 1989, Dr. Belshe assumed his current roles as a professor of medicine and director of the Division of Infectious Diseases at the St. Louis University School of Medicine. His main areas of interest include both fundamental microbiological research and clinical studies of viral diseases, particularly influenza, respiratory syncytial infections, and AIDS.

The author of over 170 papers and abstracts, Dr. Belshe has edited both editions of the encyclopedia "Textbook of Human Virology." The recipient of many honors, Dr. Belshe was presented the Marshall University Award for Distinguished Accomplishment in Research in 1986, appointed the Marshall University Scholar in 1988, and served as the Carl G. Hartford Visiting Professor of Infectious Diseases at Washington University in 1990.

Dr. Graham is a native of Sydney, Australia, who graduated M.B. B.S. with honors from the University of New South Wales. He completed his internship and residency at St. Vincent's Hospital and then completed a fellowship in cardio-renal diseases at Sydney Hospital

Dr. Graham continued his postgraduate studies in the Departments of Pharmacology and Internal Medicine at the University of Texas Health Science Center in Dallas, where he was an assistant professor. Following further research with an advanced fellowship at Massachusetts General Hospital, Dr. Graham became an associate professor in medicine at Harvard University and a visiting scientist at the Massachusetts Institute of Technology.

In 1989, Dr. Graham moved to Cleveland to accept his present position as The Robert C. Tarazi Chairman of the Department of Heart and Hypertension Research at Cleveland Clinic. He also now serves as professor of physiology and biophysics at Case Western Reserve University.

A fellow of the Royal Australian College of Physicians and of the American College of Physicians, Dr. Graham was recently awarded the doctorate of medicine by the University of New South Wales in recognition of his eminence in research. The author of over 100 scientific papers and book chapters, Dr. Graham has served as a consultant to many scientific councils in the United States and overseas.

Dr. Cotton received his medical degree in 1963 from St. Thomas' Hospital Medical School in London. After completing his internship, residency and fellowship in London, Southampton and Birmingham respectively, Dr. Cotton attained membership in 1966 in the Royal College of Physicians. In 1978, he obtained fellowship status in the Royal College of Physicians, and in 1971 he achieved a doctorate of medicine by thesis from Cambridge University.

In 1973, Dr. Cotton was appointed as a consultant physician in gastroenterology and senior lecturer in medicine at the Middlesex Hospital and Medical School in London. He held this post until 1986, when he relocated to Durham, N.C., to become a professor of medicine and chief of endoscopy at Duke University.

Dr. Cotton's major interests are the study of diseases of the upper gastrointestinal tract, the biliary tract and the pancreas; and the development and teaching of techniques in endoscopy. He has published 155 articles, 62 book chapters, seven books, as well as many editorials and reviews. Dr. Cotton is a former president of the British Society of Digestive Endoscopy.

WVACP to again hold scientific meeting in conjunction with Mid-Winter sessions

The Second Annual Scientific Meeting of the West Virginia Chapter of the American College of Physicians is set for Thursday, January 21 and Friday, January 22 at the Holiday Inn - Charleston House and will again be held in association with the WVSMA's Mid-Winter Clinical Conference.

This year's meeting begins at 6 p.m. on January 21 with registration followed by welcomes from Robert J. Marshall, M.D., F.A.C.P., governor of the WVACP and a clinical professor of medicine at Marshall University and West Virginia University; and Maurice A. Mufson, M.D., F.A.C.P., professor and chairman of the Department of Medicine at Marshall. The evening will proceed with presentations by associates and simultaneous specialty sessions.

On Friday, January 22, the program starts with a continental breakfast at 7:30 a.m. Dr. Marshall will deliver announcements at 8:15 a.m. and then John W. Leidy Jr., M.D., Ph.D., F.A.C.P., an associate professor of medicine and physiology at MU, will discuss "Osteoporosis and Thyroid Hormone." The next lecturer, Steven J. Jubelirer, M.D., F.A.C.P., medical director of the Cancer Care Center of Southern West Virginia and a clinical professor of medicine at WVU, will speak on the subject of "Thrombotic Complication of Cancer." A case analysis will then be conducted by Shawn Chillag, M.D., F.A.C.P., professor of medicine at WVU, Charleston Division.

Following a break, the conference will reconvene with a report from ACP headquarters by James L. Borland Jr., M.D., F.A.C.P., regent of the ACP. Next, Elizabeth Chalmers, senior associate for ACP government relations, health and public policy, will provide an "Update on the Legislative Scene." Borland and Chalmers will then participate in a roundtable discussion concerning problems in health care delivery in the state and nation. Other roundtable panelists will be Robert M. D'Alessandri, M.D., F.A.C.P., vice president for health sciences and dean of the WVU School of Medicine; Derrick L. Latos, M.D., F.A.C.P., clinical professor of medicine at WVU who is senior councilor-at-large of the WVSMA; and Charles E. Turner, M.D., F.A.C.P., clinical professor of medicine at Marshall.

At noon, the annual Council meeting will be held and the concluding session, "Moving Points in Medicine," which will also be the First Scientific Session for the WVSMA's Mid-Winter Clinical Conference, is scheduled for 1:30 p.m. Details about this session are given in the article which begins on the previous page.

This meeting is designated for up to 9 credit hours in Category 1 of the Physician's Recognition Award of the AMA, and physicians who are not members or fellows of ACP are welcome to attend. Registration information is available by contacting Dr. Marshall's office at 528-4676.

Warden to speak at Surgery Section breakfast

Warden

Herbert E. Warden, M.D., a professor of cardiovascular and thoracic surgery at West Virginia University, is the featured speaker for this year's WVSMA Surgery Section breakfast meeting at 7:30 a.m. on Sunday, January 25 during the Mid-Winter Clinical Conference in Charleston.

Dr. Thomas Chang, chairman of the WVSMA Surgery Section, is encouraging all interested physicians and other health care professionals to attend Dr. Warden's lecture which is entitled "Thoracic Outlet Syndrome: What Is It, What Do You Do For It, and When Do You Do It?

Dr. Warden is a native of Cleveland who received his medical degree from the University of Chicago School of Medicine in 1946. A fellow and a governor of the American College of Surgeons, Dr. Warden is also a fellow and former governor of the American College of Cardiology. The recipient of numerous honors during his career, Dr. Warden has been awarded the Albert Lasker Award for Medical Research by the American Public Health Association, the Hektoen Gold Medal of the AMA, and the J. Maxwell Chamberlin Award by the Society of Thoracic Surgeons.

To make reservations to attend this meeting, please contact Nancie Divvens at 925-0342.

Listed on this page are some of the upcoming CME programs which will be held in the state.

The programs this month were compiled by: Nancie Divvens, executive assistant for the West Virginia State Medical Association; Robin Rector, coordinator for CME for Charleston Area Medical Center; Kari Long, program director of CME and rural services for WVU; and Thelma Wilson, education coordinator for Raleigh County Medical Society.

Futher details about these CME activities may be obtained by calling Divvens at 925-0342; Rector at 348-9580; Long at 293-3937; and Wilson at 255-6341.

If you would like to have the CME programs offered by your institution or association for physicians printed in the *Journal*, please contact Nancy Hill, managing editor, at 925-0342.

West Virginia State Medical Association - Charleston

Jan. 21 - 24 1993 Mid-Winter Seminars and WVSMA/WVACP Scientific Conferences, Charleston

CAMC/WVU Health Sciences Center - Charleston

Jan. 7 - "Medicating the Depressed Patient," (teleconference), 12:30 p.m. - 1:30 p.m., WVU Health Sciences Center, Room 2014AB

Jan. 21 - "New Emergency Drugs - Pharmacy Review," (teleconference), 12:30 p.m. - 1:30 p.m., WVU Health Sciences Center, Room 2014AB

Raleigh County Medical Society - Beckley

Jan. 18 - "What AMA Can Do For You and Your Patient," Norman Taylor, M.D., Raleigh General Hospital, 6 p.m.

Jan. 21 - "The Nuts and Bolts of QA/UR," Lee Pratt, M.D., 6:30 p.m., Black Knight Country Club

Outreach Programs

Key to Sponsors

★ *WVU Health Sciences Center, Morgantown*

☐ *CAMC/WVU Health Sciences Center, Charleston*

Gassaway ☐ Braxton County Hospital, Jan. 13, 7 p.m., "Asthma Update," Blair Thrush, M.D.

Logan ☐ Logan General Hospital, Jan. 15, 12:45 p.m., TBA, Frederick Armbrust, M.D.

Montgomery ★ Montgomery General Hospital, Jan. 6, 12:15 p.m., "Endocrinology," Nicholas Cassis, M.D.

Parkersburg ★ Camden-Clark Memorial Hospital, Jan. 6, 7 a.m., "New Antibiotics," Mary Castiglia, PharmD

Parkersburg ★ Camden-Clark Memorial Hospital, Jan. 13, 7 a.m., "AIDS," Raymond Smego, M.D.

Point Pleasant ☐ Pleasant Valley Hospital, Jan. 28, TBA

Princeton ☐ Princeton Community Hospital, Jan. 18, noon, "COPD," George Zaldivar, M.D.

Ripley ☐ Jackson General Hospital, Jan. 8, 12:15 p.m., "Office Neurology," Lee Pratt, M.D.

Spencer ☐ Roane General Hospital, Jan. 19, 12:30 p.m., "Acute Respiratory Failure," Mallinath Kayi, M.D.

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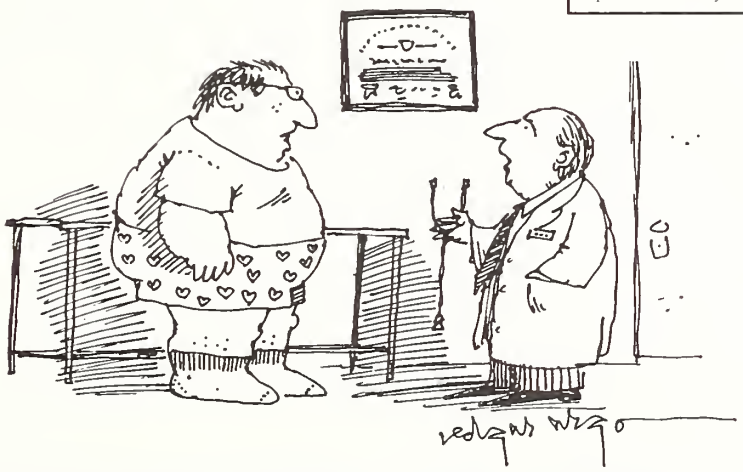

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featuring Harold E. Preston, president of Physicians Practice Management, Inc.

Mid-Winter Seminar - Thursday, January 21, 1993 at the Holiday Inn - Charleston House

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3. By using modifiers to explain your claim and improve payment

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2. Gain knowledge of new modifiers that Medicare uses and how they may affect payments
3. Understand the difference between "services not covered" and "unnecessary services"
4. Learn what Medicare will not cover and techniques for collecting for these services from patients
5. Interpret Medicare Appeals: reviews and hearing. When are they worth the effort? How do you prepare for them?

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- providing patient education
- collecting more effectively at the front desk
- using the phone to collect
- improving your cash flow with effective collection techniques
- designing charge tickets to serve as take-home statements
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1993 Mid-Winter Seminar
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10 a.m. to 3 p.m. (lunch provided)
Holiday Inn - Charleston House
Charleston, WV

Please send checks and this form to: WVSMA, P.O. Box 4106, Charleston, WV 25364.

1993 MID-WINTER SEMINARS & WVSMA/WVCACP SCIENTIFIC CONFERENCES JANUARY 21-24, 1993

at the
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Charleston, WV

THURSDAY SEMINARS & SCIENTIFIC SESSION:

"Constituent Skills Workshop"

"Strategies for Protecting the Financial Health of Your Practice"

"WVCACP Associates' Presentations"

FRIDAY & WEEKEND SCIENTIFIC SESSIONS:

"Moving Points in Medicine"

"Cancer Screening Testing"/"Psychotropic Drugs"

"Current Issues in Geriatrics and Long-Term Care"

"Molecular Biology"/"Chemotherapy"/"Sleep Disorders"

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Please make check payable to WVSMA and return to: WVSMA, PO Box 4106, Charleston, WV 25364

This page of material is submitted and paid for by the Bureau of Public Health.

Healthy West Virginia Coalition encourages preventive care

According to a report recently issued by the Healthy West Virginia Coalition, unhealthy behaviors are creating unnecessary costs for consumers and initiatives to prevent health problems before they occur should be an important part of any state or national health care reform package.

In releasing their findings and recommendations, coalition members urged the governor and the Health Care Planning Commission to put as much emphasis on prevention as they do on access, liability, cost containment and other areas targeted for reform. The report emphasizes that prevention needs to go beyond measures such as mammograms and yearly physicals, and needs to include support for healthy behaviors such as tobacco control, seatbelt use, good nutrition, exercise and other activities which can prevent injury and illness.

According to the coalition, although individuals are ultimately responsible for their unhealthy behaviors, harmful lifestyles are also shaped by environmental and cultural factors. The report calls for the development of solid prevention policies and recommends the implementation of wellness programs in schools, worksites and communities around the state.

The Healthy West Virginia Coalition is made up of representatives from the State Health Education Council, the Wellness Council of West Virginia, the West Virginia Bureau of Public Health, the West Virginia School Health Committee and the West Virginia State Medical Association.

For more information or for a copy of the report, contact David Steurer, Coalition Chairman, at (304) 558-2529.

Manager named for Diabetic Eye Project

Charleston resident Melvin Fletcher has recently been hired as a project manager for the Bureau's Diabetes Control Program. A former senior medical representative with Pfizer Pharmaceuticals, Fletcher will be overseeing activities related to the program's Diabetic Eye Project.

The project was launched in 1990 in cooperation with West Virginia University's Department of Ophthalmology. It was developed in an effort to help people with diabetes have a better understanding of necessary eye care since diabetic eye disease is the leading cause of new blindness in adults.

Fletcher will be expanding the project into rural communities which don't currently have available screenings for the disease. He will select and develop training for communities and institutions interested in becoming screening sites. The screenings are offered free to anyone diagnosed with diabetes who has not had a dilated eye exam in the past year.

To become a screening site, obtain a screening schedule or receive more information on the project, contact Melvin Fletcher at (304) 558-0644.

EMS personnel continue to advocate "Two for Life" bill

Emergency medical services personnel from around the state will once again be supporting "Two for Life" legislation aimed at improving EMS care for West Virginia residents. This proposed bill would generate as much as $2.4 million a year by collecting an additional $2 fee at the same time as the annual motor vehicle fee.

Half of the monies collected will go directly to EMS squads for operational support. Additional funds will be used to replace aging, unreliable ambulances. Currently, there are over 300 emergency ambulances with more than 70,000 miles on the odometer and/or are seven or more years old. Remaining funds would be available to counties on a 50/50 match for purchasing equipment for ambulances, to train personnel and to obtain training equipment.

The Bureau's Director of Emergency Medical Services Dr. Fred Cooley, says this money is critical to the future of EMS care in the state. He says many communities must rely on volunteer squads, which may be underfunded and may not have enough training.

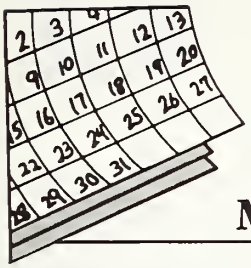
According to Dr. Cooley, the lack of funds for replacement of equipment and ambulances in rural communities discourages good volunteers from wanting to stay with these squads. Improved communications are also needed in rural areas where emergency dispatch times are far above projected goals and where prompt, qualified emergency care can mean the difference between life and death since hospitals are not as accessible.

For more details about the bill, contact Dr. Cooley at (304) 558-3956.

State EMS award presented during annual conference

The 1992 Samuel W. Channell Memorial Award for Excellence in Emergency Medical Services was awarded to Jeffrey S. Harbour, the training director of the Kanawha County Emergency Ambulance Service Authority, during the state's annual EMS Conference in Canaan Valley in October.

Other nominees for this year's award included: Benny Capparelli (McDowell County Emergency Ambulance Service Authority); Gail M. Dragoo (Regional Medical Services, Region VI/VII EMS Office); Hazel Ewing (Point Pleasant Squad); Carolyn Goldizen, R.N. (Grant County Hospital and Grant County Ambulance Service); John Harrah (Mason Emergency Squad); and Karen L. Heidenreich (Brooke County EMS).



Medical Meetings

January

10-12—Third Primary Care Research Conference, Agency for Health Care Policy and Research (sponsor), Atlanta
14-17—Intense MRI Neuro Weekend, MRI Education Foundation, Inc. (sponsor), Cincinnati
15-17—What's Hot in Allergy? Allergy Foundation of Northern California (sponsor), Squaw Valley, Cal.
16-17—Advanced Trauma Life Support Student® Course, Georgetown University Medical Center (sponsor), Washington, D.C.
16-18—10th Mohs Micrographic Surgery Conference of the Skin Cancer Foundation, Rancho Mirage, Cal.
16-23—Topics in Hematology and Oncology, George Washington University Medical Center (sponsor), St. Martin, French West Indies
21-24—1993 Mid-Winter Seminars and WVSMA/WVACP Scientific Conferences, Charleston
29-30—Transfusion Medicine: Update 1993, American Association of Blood Banks (sponsor), Atlanta
31-Feb. 3—American Hospital Association, Washington, D.C.

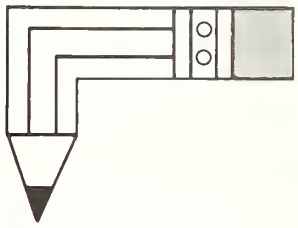
February

1-3—Cardiovascular Conference at Snowshoe, American College of Cardiology (sponsor), Snowshoe, W.Va.
3-4—Blood Bankers Taking Action: AABB Legislative Advocacy Workshop, American Association of Blood Banks (sponsor), Washington, D.C.
4-7—American Society for Adolescent Psychiatry, San Diego
7-11—Southeastern Surgical Congress, Tarpon Springs, Fla.
12-14—American Academy of Pain Medicine, San Diego
12-15—American Association for Geriatric Psychiatry, New Orleans
15-18—1st International Congress on Medical-Legal Aspects of Work Injuries, Kenes-Gil Travel (sponsor), Jerusalem, Israel
18-23—American Academy of Orthopedic Surgeons, San Francisco
20—Obsessive/Compulsive Disorders, Ohio State University (sponsor), Columbus
25-26—11th Annual International Symposium on Man and His Environment in Health and Disease, American Environmental Health Foundation, Inc. (sponsor), Dallas
26-March 3—California Medical Association's 122nd Annual Session and Western Scientific Assembly, Anaheim, Cal.

For More Information . . .

Contact the Journal at (304) 925-0342 for additional information about most of the above meetings.

Poetry Corner



Dr. Ed Flink

Basically serious in personality,
What a delight to see
His reserve melt into
A chuckle at a humorous
turn of events.

Remnants of Swedish ancestry
Could be detected in the short, soft "s"
In words like "these" and "those,"
As if he was in too much of a hurry
to drag them out.

He hurried through the "s" sounds
Just as he hurried
Through the halls of the Medical Center
That was his love.

An occipital cowlick stood appropriately
Like a question mark
Over the head which never quit
Searching for answers
to medical mysteries.

He was the manifestation
Of Continuing Medical Education --
Never satisfied
With his level of knowledge.

He balanced scientific knowledge
With a religious faith,
Commanding respect.

Many were influenced by him;
He leaves an unfillable vacancy
In our lives. Missing him now
Is a small price to pay
For having known him.

Robert L. Smith, M.D.

(Please see Dr. Flink's obituary on page 572.)

Please address your submissions for Poetry Corner to:
Stephen D. Ward, M.D., Editor
West Virginia Medical Journal
Box 4106
Charleston, WV 25364.

WEST VIRGINIA UNIVERSITY HEALTH SCIENCES CENTER

Compiled from material furnished by the West Virginia University Health Sciences Center, Communications Division, Morgantown.

WVU performs state's first bone marrow transplantation

A 31-year-old West Virginia woman with resistant lymphoma has become the first patient in the bone marrow transplantation program at WVU's Mary Babb Randolph Cancer Center.

Although this is the first bone marrow transplantation in West Virginia, the treatment is no longer considered an experimental therapy for certain types of cancer, says Dr. Joseph P. Lynch, director of the cancer center's adult bone marrow program.

"Bone marrow transplantation offers a hope for cure to people who have no other medical alternative," says Dr. Lynch. "But, it is by no means a sure thing for any patient," he added.

In addition to the adult program, the cancer center is starting a pediatric transplantation program under the direction of Dr. Marie Steiner. It offers treatment to patients with childhood leukemia and other cancers.

"We have had to send many West Virginia children to transplantation centers in other states," says Dr. Steiner. "It adds to their stress, and burdens their family when they are treated so far from home. We are very pleased to be able to offer this form of therapy here."

WVUH acquires computed radiography

WVU Hospitals is the first hospital in West Virginia and the only hospital in the tri-state area to begin using computed radiography (CR), the latest in state-of-the-art X-ray equipment for acquisition of a digital X-ray image.

"Computed radiography electronically captures, processes and transmits medical images," says Dr. Mathis Frick, chair of the WVU Department of Radiology.

An image can be transmitted by the CR unit and viewed on a computer screen at a workstation. Computerized workstations will eventually be located in the adult critical care units, the Emergency Department, and the Radiology Department. The work stations will allow for instant image review and enhancement by the attending physician. "Computed radiography will reduce a patient's exposure to radiation, reduce the need for repeated exams and ensure consistency of images," says Dr. Frick. "The computed radiography system will also reduce the patient's hospital stay as a result of improved diagnosis, communication of diagnosis and physician productivity in treatment of the patient," he added.

In the next few years, WVUH hopes to begin to help rural health clinics around the state acquire computed radiography systems and develop a patient care network.

Granke named director of vascular lab

Dr. Kenneth Granke, assistant professor of vascular surgery, has been named director of the vascular laboratory at WVU Hospitals.

Dr. Granke joined the Department of Surgery in 1990 after completing a vascular surgery fellowship at the Alton Ochsner Medical Foundation in New Orleans. A graduate of the Wayne State University School of Medicine in Detroit, Dr. Granke completed a family medicine internship at the University of Michigan Hospitals and did a surgery residency at St. Joseph Mercy Hospital in Ann Arbor, Mich.

Pharmacology/ Toxicology celebrates awarding 100 Ph.D.s

The Department of Pharmacology and Toxicology held a celebration November 13-15 in honor of awarding 100 doctor of philosophy degrees during the last 30 years.

Approximately 50 of the department's 100 Ph.D. graduates participated in the program, which included five research symposiums. Several master of science graduates and former faculty also participated.

Three faculty receive emeritus appointments

The following School of Medicine faculty have recently received emeritus appointments:

- William J. Canady, Ph.D., professor emeritus, biochemistry
- Marshall J. Carper, M.D., professor emeritus, family medicine
- John E. Jones, M.D., professor emeritus, medicine

Infectious diseases faculty present session at AETC meeting

Four infectious diseases faculty members presented a problem solving roundtable discussion session at the Second National Workshop of AIDS Education and Training Centers (AETC), December 10-12 in Newark, N.J.

"HIV/AIDS Clinical Training Program in a Rural State" was presented by Dr. Rashida Khakoo, professor and section chief; Dr. Melanie Fisher, associate professor; Dr. R. Wesley Farr, assistant professor; and Dr. Raymond Smego, associate professor. Kim Roy, R.N., M.A, a former AIDS education nurse at the HSC, also participated.

Smego presents abstracts in Thailand

Dr. Raymond A. Smego Jr., M.P.H., F.A.C.P., director of the HSC Program in International Health and associate professor of infectious diseases, presented two research abstracts at the XIII International Congress for Tropical Medicine and Malaria, November 29 - December 4 in Bangkok, Thailand.

Dr. Smego presented "Long-Term Immunogenicity and Protection Provided by a Plasma-Derived Hepatitis B Vaccine Given to High-Risk Chinese Adolescents" and "Persistence of Immune Response and Protective Efficacy Following Hepatitis B Vaccination of High-Risk Chinese Neonates."

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E. Cohen, M. D.

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H. L. Kettler, M. D.

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Marshall University School of Medicine

Compiled from material furnished by the Office of University Relations, Marshall University, Huntington.

NASA research project underway at Marshall

A major National Aeronautics and Space Administration research project designed to study the effects of the weakening of muscles in weightless conditions and how to prevent this condition is being conducted at Marshall University. Marshall was selected for this research program after NASA decided to phase out life sciences research at its Kennedy Space Center.

This study, which has implications for earthbound heart patients as well, is expected to cost approximately $190,000 the first year and $660,000 over the next three years. In addition to the funds, NASA is furnishing a 1,500-square-foot laboratory with an electron microscope, equipment for measuring muscle function, computers and other devices needed for the research.

Dr. Gary A. Dudley, a Marshall graduate who led muscle physiology studies at the Kennedy Space Center, will direct the new Research and Training Center in Integrated Physiology at Marshall. Dr. W. Donald Williams, acting vice president for research and academic development, said Dr. Dudley will also be an important resource for the Sports Science and Wellness Institute, a cooperative venture of Marshall's College of Education, Department of Athletics, and School of Medicine.

"Dr. Dudley is a leading authority on the effects of exercise, the compatibility of resistance and endurance training, strength training in pre-adolescents, and other areas that have obvious relevance to athletes who are trying to reach their full potential," Dr. Williams said.

Dr. Dudley said the problem of muscle deterioration must be addressed before astronauts can spend extended periods on Space Station Freedom, expected to be operational shortly after the year 2000. "Body systems deteriorate during long stays in space, and the skeletal muscles are expected to be especially affected," he explained.

This project will look at the effect of disuse on the brain's control of skeletal muscle, as well as on the ability of blood vessels to maintain an adequate blood supply to the muscles. To simulate weightlessness, the project will use unilateral lower limb suspension. Participants will use crutches, wearing a shoe with a 10-cm. sole on their "active" foot so that the other one does not touch the ground.

"Studies show that this disuse causes muscle changes similar to those found in weightlessness, and also that the body tends to compensate in similar ways," Dr. Dudley said. "As a result, we can see why neuromuscular changes occur and develop potential countermeasures. One thing we expect to learn, for example, is whether one type of muscle is affected more than another. "If so, this would tell us whether to recommend endurance exercise or strength-building exercise for astronauts."

According to Dr. Dudley, the cooperative working relationships between community physicians, faculty physicians and non-physician faculty members were a major factor in the decision to locate the program at Marshall. He also cited the state-of-the-art magnetic resonance imaging facility on campus which can be used to study peripheral blood flow.

Dr. Dudley has already worked with six physiologists at the Marshall University School of Medicine to develop another NASA proposal, on which a decision is expected by January. This project will study the effects of weightlessness on both muscle and bone. Researchers will look at how the nervous system controls voluntary muscles, how the blood vessels are affected, and what underlying metabolic changes occur. In addition, they will study the ways weightlessness affects sleep.

"This should be well received, especially in light of the extreme difficulty shuttle astronauts have in getting a good night's rest," Dr. Dudley said. "To our knowledge, no research has been conducted in this important area."

Dr. Gary L. Wright, chairman of physiology, will be co-director of the proposed project. Other MU researchers working on the project team will be Dr. Howard Aulick, Dr. Susan DeMesquita, Dr. Todd Green, Dr. Elsa Mangiarua and Dr. William McCumbee. Also participating will be Michigan State University researcher Ronald Meyer and Soviet-trained space scientist Igor Sergeev, who is now in Johannesburg, South Africa.

The program will serve as a training ground for five postdoctoral students, 10 graduate students pursuing Ph.D. degrees in biomedical sciences with an emphasis in space biology, and five undergraduate students.

Since muscle fatigue and poor function of skeletal muscle also contribute to congestive heart failure, Dr. Dudley plans to continue his studies on heart failure which are being funded by the American Heart Association and the U.S. Department of Veterans Affairs. The combined budgets of those projects total more than $450,000.

A member of the U.S. Olympic Committee's Scientific Advisory Committee, Dr. Dudley's work has been published internationally and he has reviewed manuscripts, abstracts and grant applications for many scientific organizations. He is also a member of the Extended Duration Orbiter Exercise Working Group of NASA's Lyndon B. Johnson Space Center.

Dr. Dudley received his master's and doctoral degrees from Ohio State University. He has taught at the State University of New York Upstate Medical Center, Washington University of St. Louis, Ohio University, the University of Florida at Gainesville and the University of Central Florida.

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Always remember – "You're just a medical student"

Yes, folks that's true. You are just a medical student -- nothing more and nothing less.

How many times have you said or heard these statements? -- "What kind of doctor are you?" "Oh, I'm just a medical student" -- "Are you going to be working with Dr. Jones?" "No, I'm just a medical student." -- "Doctors must improve our health care delivery system." "I agree but I won't be able to help, I'm just a medical student."

I am continually amazed by my fellow physicians who fail to recognize the significant power they have to influence public opinion on a daily basis. Daily contact on a one-to-one basis with over 30 to 50 individuals who are looking for help and advice is a great opportunity to influence public opinion. Of course, we must remember that actions, as well as words, will dictate the results of this influence and ultimately the opinion. As a student, you have some of the same power.

Of course, you could not possibly help me because you are just a medical student. I would like to take a moment to change your mind. The American Medical Association is the largest group of organized physicians in the country. For several years, a medical student has been a member of the board of trustees and the House of Delegates recently gave that student voting privileges on the board. This vote will always represent the medical student section of the American Medical Association. A pretty big step for a group of just medical students. The student section has been influential in many AMA policy decisions over the last several years, and being a medical student gives you an opportunity to have a voice.

Ok -- so we have a vote -- what does that have to do with me in West Virginia? I have to define the term "just" a little more for you. "Just" sometimes means that we have reached a final level and may go no further. More often, it implies there is more to move on to. Now, I assume that each of you is in a medical school to graduate and become a physician. The "J" word will be gone sooner than you think. Now, since you are "just" a medical student, all of us are out here trying to decide how you are going to practice medicine when the "J" word is gone. You can and should be involved in the process, and as a medical student you have this power.

Where does your power come from? It comes from the fact that you will be doctors at some point. Federal and state governments realize that if they can influence your choices now, you will be more likely to choose a primary medical field, stay in their state, use allied health professionals, and treat indigent patients. They also realize there are incentives that they can offer as a means of influence, and yes, they often listen to what we have to say. In fact, they may be more likely to listen to a medical student than they would to a physician in practice. Loan forgiveness and help in establishing a practice are just two of these areas. Thus, there is a significant opportunity for you to be involved in deciding how medicine will be practiced in the future. Being involved in the process and being organized can mean the difference between being in control or being controlled.

The West Virginia State Medical Association has been working to establish a strong student section that can bring ideas from West Virginia and promote them on a national level. On January 23 at 10 a.m. during the WVSMA's Mid-Winter Clinical Conference, there will be a meeting of your organization -- the WVSMA's Student Section -- to discuss policy and elect officers. Your opportunity to become involved and a chance to shape your future begins at this meeting.

Finally, do not forget our patients who rely on us not only to provide their medical care, but also to make sure the system works to their advantage. Do not forget your colleagues who rely on you to make sure they maintain the freedom to practice in a reasonable atmosphere for all. Even though you are "just" a medical student, you are in the system, and we need your help.

Please mark this date on your calendar and plan on attending this very important meeting. You can't afford to be just a medical student anymore.

James L. Comerci, M.D.
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Obituary

Dr. Flink

Edmund B. Flink, M.D.

Edmund B. Flink, M.D., Ph.D., emeritus chair of the WVU Department of Medicine, died December 5 in Cambridge, Minn. Dr. Flink was the "founding father" of WVU's Health Sciences Center. He was 78.

Dr. Flink was born on Jan. 27, 1914, in Isanti, Minn., the son of Carl and Hulda Flink. He received his medical degree in 1938 from the University of Minnesota, where he completed his internship and served his residency in internal medicine at the University of Minnesota Hospital.

A professor of medicine at the University of Minnesota from 1942 until 1960, Dr. Flink then served as chairman of West Virginia University's Department of Medicine until he retired in 1976. After retiring, he became a Benedum professor at WVU and continued to work as an attending physician at the WVU Health Sciences Center.

During his career, Dr. Flink had a major influence on the medical education of many physicians in the state. In 1990, Derrick L. Latos, M.D., F.A.C.P., who was then president of the WVSMA, established the WVSMA's Edmund B. Flink Address in his honor. Dr. Latos had been one of Dr. Flink's students and he created the annual Flink Address not only to recognize Dr. Flink, but to provide an internal medicine lecture which would have current implications on the practice of medicine and offer a historical perspective.

Surviving are his second wife, Margaret Flink of Cambridge; one daughter, Alice Kessel of Morgantown; three sons, Charles Flink of Moundsville, James Flink of St. Paul, Minn., and Paul Flink of Waukesha, Wis.; one stepdaughter, Marlys Fast of Cambridge; and two stepsons, Steven Flink of St. Paul and John Flink of Apple Valley, Minn. He was preceded in death by his first wife, Marian.

(Please see poem about Dr. Flink on page 565.)

County Societies

McDowell

At the society's December Christmas party, members voted to donate $500 to Hospice Care of Mercer County, Inc. and also gave $50 to the United Way.

Dr. Herland presented the WVSMA's letter concerning the Physician Medicaid Enhancement Tax, and after discussion, it was voted to send out copies of this letter to the members for their input. Dr. Vega, chairman of the Nominating Committee, moved that the society's present officers be retained for 1993 and this motion was passed unanimously.

The dinner for this event was sponsored by Glaxo Pharmaceuticals.

Monongalia

The principal speaker for this meeting was Judy Smith, executive director of the Rape and Domestic Violence Information Center, who discussed domestic violence.

Following Smith's presentation, a business meeting was held and 28 physicians were presented for membership via second reading, and Dr. Pearson presented five potential members via first reading. In other business, Mrs. Clausell of the Monongalia County Medical Society Auxiliary's Governing Board then addressed the members about the Auxiliary's plans for 1993.

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PHYSICIAN'S RECOGNITION AWARDS

We wish to congratulate the following WVSMA members who recently received Physician's Recognition Awards from the AMA for voluntarily completing 150 credit hours of continuing medical education during the past three years.

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Henry K. Driscoll, M.D.
Scott A. Riley, M.D.
John P. Sheils, M.D.
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Arnold F. Gruspe, M.D.

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Kyle F. Fort, M.D.

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Cordell A. De La Pena, M.D.

Kanawha
Samuel R. Davis, M.D.
Jerry W. Edens, M.D.
Bruce A. Foster, M.D.
Andrew W. Goodwin II, M.D.
Albert F. Heck, M.D.
Brenda L. Holbert, M.D.
James T. Smith, M.D.
Ralph S. Smith Jr., M.D.
Isidro P. Uy, M.D.
Alfredo C. Velasquez, M.D.
James G. Walker, M.D.
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Monongalia
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Stanford J. Huber, M.D.
David A. Stoll, M.D.
Abdolkarim N. Sohrabi, M.D.
Donald M. Wald, M.D.

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Sudhakar A. Reddy, M.D.
Harry L. Shannon, M.D.

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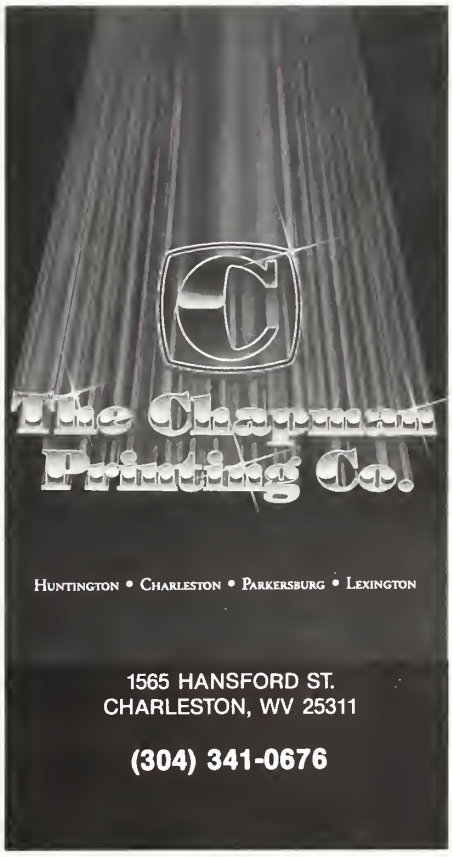

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